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The President of the PSGH, Mr. Dela C. Ashiabor, flanked by Dr. Lawrence Honney, left, the key note Speaker, and Prof. Beckett, a guest at the '98 AGM, held at Cape Coast

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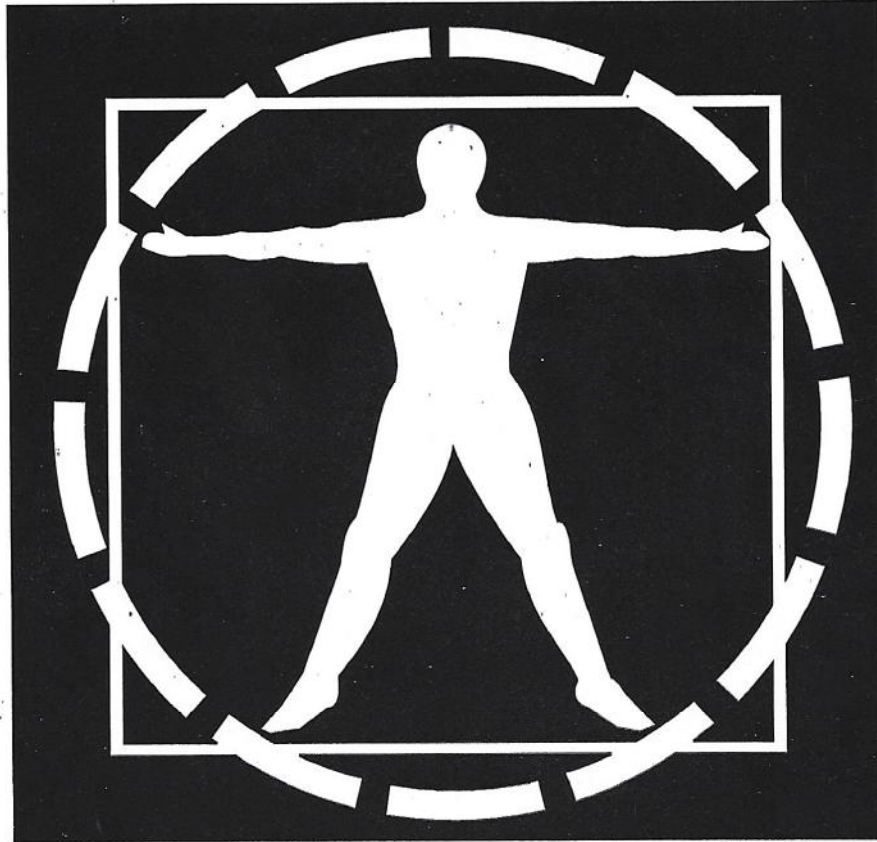
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GEARING UP FOR THE FUTURE

This is the information age. Indeed it is the age of unprecedented advancement in technology. A marriage of the two has helped to make available a vast amount of information that is accessible to all.

Medical and health information, including information on drugs can be accessed, for example on the internet. How prepared are we as Pharmacists to use this information? How prepared are we when non-health professionals confront us with such information which they cannot fully comprehend?

Many people have envisaged that the already blurred demarcation between Pharmacy and medicine would sooner than later become more blurred. The traditional role of Pharmacists dispensing prescriptions is becoming overshadowed by disease and patient management. How prepared are we as Pharmacists to take advantage of such opportunities?

Many Prescription Only Medicines (POMs) are increasingly being transferred onto the Over The Counter (OTC) list. This development has some advantages for the Pharmacist. To derive any benefit from such development calls for the Pharmacist not only having an extensive and comprehensive knowledge about the drugs. She/he must be able to make a good assessment of the conditions that would call for him/her recommending such drugs to the patients so as not to be seen as just out to make money. Are we prepared to take this advantage and the ever increasing influence of Pharmacists in prescribing issues?

Again, with the increasing availability of medical information to laymen, the increasing availability of and accessibility to drugs, it would be naive to expect the incidence of self medication and drug abuse to decrease. The responsibility of helping the people of Ghana who self-medicate make informed choices is that of Pharmacists, more than that of any other member of the healthcare team.

Quality counsel and counseling are vital in this direction. What is the level of the preparedness of pharmacists, friends of the human race, the only known experts of drug and custodians of drugs, to protect the human race from destroying itself through the improper use of drug?

Capacity building in the pharmacy profession to meet present challenges and future development within and outside the profession cannot be deferred. The development and improvement in the human resource, the one most important element in any profession, and especially for this profession must be pursued in earnest. It should be the desire of all pharmacists to improve their individual knowledge base; for the collective benefit of all Ghanaians.

As the Society and the Pharmacy Council join forces to fashion out continuing education for pharmacists, it behoves us all to avail ourselves of this opportunity to improve on the quality of service to our clients. Our participation in the continuing education programme should not be for the sake of regulatory demands; let's educate ourselves.

Whilst we are at it, let us also endeavor to strengthen the Society through our active participation in its activities at the Branch and wing levels. Let's "repent" of our past deeds and pledge to do better for the Society, beginning with our active participation in the on-going survey to identify the causes of low attendance at meetings. It is the only Professional Society we have. Let us make it stronger. ●

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TB CASES ON THE RISE

MULTI-DRUG resistant tuberculosis is on the rise. There are eight million new cases of TB every year world wide.

TB remains the single biggest killer of young women and kill as many women as all combined causes of maternal mortality.

Only 16 per cent of the world's TB sufferers receive the TB treatment recommended by the World Health Organisation (WHO).

"We are at a crossroad in the global tuberculosis epidemic," says Dr. Gro Harlem Brundtland, Director-General of WHO. "We have a choice to act now and control tuberculosis, or we can continue business as usual and let strains of multi-drug resistance TB thrive. We have a cure, we need to mobilize the world to use it".

Dramatic successes in many countries with the WHO recommended TB Treatment, DOTS (Directly Observed Treatment Short-course), show that the spread of TB and the emergence of multi-drug resistance can be stopped, according to the 1999 WHO Global Tuberculosis Report.

But, due to an inadequate global response to the epidemic, "hot zones" of multi-drug resistance are emerging, particularly in Eastern Europe.

To meet the challenge, WHO has launched the "Stop TB Initiative" in partnership with the World Bank, the Centres for Disease Control and Prevention (CDC), and a growing coalition of non-governmental organisations working to stop TB.

The Initiative is working to accelerate TB control by expanding the global coalition of partners beyond the health sector, place TB higher on international political and health agenda; and significantly increase investment in TB control.

While the number of patients receiving DOTS has been increasing at a rate between 10 and 20 per cent each year for the last four years - meaning an additional 100,000 infectious patients treated each year - an additional 250,000 patients per year need to be reached and treated to achieve the global goal

by the year 2005, according to the 1999 Report.

VAT ON IMPORTED PHARMACEUTICAL MATERIALS

The Pharmaceutical Manufacturers Association of Ghana (PMAG) has urged the government to waive the ten per cent VAT imposed on their imported raw materials because of its negative effect on the industry.

Investigations have established that prices of imported pharmaceutical products were largely cheaper than the locally manufactured products since the introduction of the new tax system late last year.

Pharmaceutical raw materials were exempted from Sales Tax before the inception of VAT; the present situation whereby most imported finished pharmaceutical products are exempted from the VAT, thus making them cheaper, serves as a disincentive to local pharmaceutical firms. The Association recalled that the sector Ministry had urged the Ministry of Finance to expedite action on VAT charged on pharmaceutical raw materials.

It noted that the government has the vision of encouraging local industries; but the present stalemate between the Ministry of Finance and the Ministry of Health on the VAT issue could wreck this commitment. ●

MALARIA VACCINE UNDER INVESTIGATION

The malaria vaccine, a major advance in malaria prophylaxis, is still in the experimental stage. Nevertheless, if an effective vaccine reaches the market, the consequences of stemming the growing malarial epidemic worldwide is profound.

Growing resistance to currently available prophylaxis by malarial parasites is compounding the problem of malaria. There are estimated to be up to 500 million cases of malaria in the world each year, with approximately 1 in 60 people dying of the disease. Therefore, the need for a suitable alternative/adjunct to currently available measures is pressing.

The good news is that the world's most sophisticated antimalarial vaccine has passed the first stage of testing with flying colours. What distinguishes this vaccine from other experimental ones is that it combats the malarial parasite, Plasmodium Falciparum, at each stage of its life cycle. Preliminary tests in rabbits and mice have shown that the vaccine works as planned. Trials in monkeys are imminent and, if these are successful, clinical trials in humans could begin as early as next year.

By examining blood from Kenyan children who had developed immunity to malaria, a team from the USA discovered several specific areas of parasite antigens most likely to be attacked by the children's antibodies and white blood cells. They identified 21 subsegments of these antigens, known as epitopes, that promoted even stronger immune responses than the complete antigens themselves. So, an artificial gene was created to manufacture one protein containing all of the epitopes. After injection of this protein into animals, it was found that purified serum and antibodies from the animals recognised all four parasitic stages and that the vaccine also triggers production of white blood cells that attack the parasite at all four stages of its life cycle.

It is anticipated that the vaccine could be specifically designed to target various malaria parasite strains around the world. What is important for success of the vaccine, though, is that levels of antibodies generated in humans must be comparable to the high levels achieved in rabbits.

New Scientist, 20 February 1999: 11
The Annals of Pharmacotherapy, October 1998; 32: 1104

LEGISLATIVE INSTRUMENT, LI, 1645

Parliament passed the Legislative Instrument, LI 1645 in July, 1998. The LI defines professional misconduct, disciplinary procedures and penalties against pharmacists. It also prescribes fees to be changed by the Pharmacy Council for the registration and renewal of various licenses and also for registration as a pharmacists. Copies may be obtained from the Assembly Press in Accra (Opposite Novotel Hotel).

INTERNAL AUDIT COMMITTEE

In fulfilment of the mandate of National Council and in conformity with the provisions of section 9 (vi) of the Society's Constitution, the Internal Audit Committee has been inaugurated on the 7th April, 1999.

The three member committee is made up of Miss Irene Osam-Tawiah, Mr. Y. Acheampong Boateng and Mrs. R. Parker-Allotey with Mr. Louis Nortey as Consultant. In his inaugural address, the President of the Society, Mr. Dela C. Ashiabor stated that the Society was growing in membership and scope of operation.

He noted that there was the need for appropriate structures and supporting systems to be put in place to ensure that the secretariat functioned effectively and efficiently. The President observed that, with the recent appointment of a colleague as Executive Secretary, it was anticipated that functional lapses would be rectified. He charged the Committee to examine the society's operations critically and make such recommendations to the standing Executive Committee as would be necessary to ensure prudence in expenditure.

Executive Secretary.

DEATH ASSOCIATED WITH VIAGRA IN CARDIAC PATIENTS

Posey has produced an excellent and comprehensive article surveying the mortality associated with the use of Viagra in cardiac patients and the new guidelines for its safety in use. The FDA have reported 123 deaths associated with the erectile dysfunction drug Viagra (sildenafil). The American College of Cardiology (ACC) and the American Heart Association (AHA) are developing a consensus document to help practitioners treat men with cardiovascular complications who also use Viagra. In addition to the absolute contraindication in patients taking nitrate drug therapy, Viagra may be potentially dangerous in patients who:

- * Have acute coronary ischaemia but are not on nitrates;
- * Have congestive heart failure, borderline low blood pressure, and borderline low volume status;
- * Are on complicated multidrug antihypertensive regimens;
- * Are taking drugs (e.g. erythromycin or cimetidine) or have conditions (e.g. Liver or renal disease) that can prolong the half-life of Viagra.

When treating patients with acute cardiac ischaemia syndromes who have taken Viagra, the physician is advised to determine when the last dose of the agent was taken. A precipitous reduction in blood pressure is possible if nitrates are used within 24 hours of Viagra administration or longer in patients in whom the Viagra half-life is prolonged. During this time non-nitrate agents should be used, such as beta-blockers. Patients with acute myocardial infarction should be treated as advised in the interim ACC/AHA clinical practice guidelines, except that nitrates must not be used. In those patients with unstable angina who have taken Viagra, only non-nitrate antianginal medication should be used. In patients who receive Viagra and nitrates and develop a severe hypotensive response, nitrate and nitroprusside therapy should be stopped and the following interventions considered:

- * Place the patient in Trendelenburg's position (patient lies supine on a plane inclined at 45 to the horizontal with the head at the lower end and the legs flexed at the knees);
- * Aggressive fluid resuscitation; Judicious use of an intravenous alpha-adrenergic agonist (e.g.

phenylephrine).

* Administration of an alpha- and beta- adrenergic agonist (e.g. norepinephrine), with the realisation that this could exacerbate or lead to an acute ischaemic syndrome; Intraaortic balloon counterpulsation.

Of the 123 deaths reported to the FDA in patients who have taken Viagra, 12 patients were not from the United States, 30 concerned patients with unverifiable information, and use of the drug could not be confirmed in 12 others. Of the 60 patients remaining, 46 had cardiovascular events (most often myocardial infarction or cardiac arrest), two (2) patients had strokes, and cause of death was not mentioned in 21 others. Of those who died and an age was provided, the median age was 55 years. Of 31 patients for whom a Viagra dose was specified, 26 took 50 mg. Nitroglycerin or nitrate medications were administered to 12 of the men. About 36% of the patients died or had symptoms within four or five hours of drug use, including 18 patients who developed problems during or immediately after intercourse. Nearly three-quarters of the patients had one or more risk factors for cardiovascular or cerebrovascular disease. The FDA plan to continue monitoring the safety of Viagra by carefully reviewing reports of death and other serious adverse events. The FDA have noted that some 3.6 million prescriptions have now been dispensed for Viagra, meaning that death associated with the drug is a fairly rare event- especially considering the patients pre-existing conditions.

Reference

1. Posey, L.M. (1989). Cardiology groups issue sildenafil guidelines. *Pharmacy Today*, 4 (9), 1, 6.

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WELFARE FUND ADMINISTRATION

The Management Board of Trustees for the administration of the welfare scheme for contributing members of the Pharmaceutical Society of Ghana was inaugurated on the 3rd June, 1999. This follows from the report of the Welfare Review committee which was endorsed by the 1998 Annual General meeting held in Cape Coast. The inauguration completed the various activities required for the smooth operation of a viable scheme which began in 1997 as welfare fund that only responded to members' social needs.

Membership of the Board comprises all the six wings and interest groups of the Society and two national officers. The Chairman is Mr. John K. Arthur, the Vice President of the PSGH. The Board has been tasked with the responsibility of administering the scheme to members in respect of bereavement, celebrations and distressed social life. The standing Executive Committee has hitherto carried out all disbursements on behalf of Council.

In order to offer enhanced benefits to members, the PSGH is considering converting the fund either into a group insurance instrument or an Endowment Fund. To this end the Society has taken steps to secure the necessary professional management of the fund to enhance our return on investment.

Executive Secretary.

PHARMACEUTICAL MANUFACTURERS FORM ASSOCIATION

Pharmaceutical manufacturing companies in the country have formed an association, Pharmaceutical Manufacturers Association of Ghana (PMAG), which was inaugurated by a member of the Council of State, Dr. (Mrs.) Mary Grant on the 14th of April, 1999.

Dr. (Mrs.) Grant said the local pharmaceutical sector plays an important role in the health delivery system, producing about 30 per cent of the drug requirements of the country comprising mostly drugs listed in the national essential drug list. She urged the association to support research projects on local herbal medication of proven therapeutic efficacy to enhance their availability and acceptability.

Dr. J. A. Q. Blukoo-Allotey is the President of PMAG. In his address he said the association would institute quality control training schemes for its personnel and establish a common state of the art quality control laboratory to promote quality assurance.

CASH AND CARRY UNDER REVIEW

The Minister of Health, Mr. Samuel Nuamah-Donkor has said in Accra that the implementation process of the cash and carry system is being reviewed to give it a human face.

Speaking at the opening of a workshop on the "reproductive health and rights of women in Ghana", the Minister said hospitals will be instructed on when patients brought in under emergency situations would be required to make any payment towards their treatment.

The Minister explained that currently, some institutions demand immediate payment before treatment begins whilst some give a grace period of a few days. He observed that there was need to foster uniformity and to ensure that many people have the opportunity to benefit from the country's health services.

ELECTIONS '99

All Pharmacists who wish to contest any of the positions of the National Executive Committee of the Society are kindly requested to ensure that their completed nomination forms reach the Secretariat by 31st August '99. Such nominations should include pictures and short profiles of the candidates for publication in the conference edition of the *Journal*.

EDITOR

PAY YOUR CONTRIBUTION NOW TO SUPPORT THE FACULTY OF PHARMACY ENDOWMENT FUND.

TOWARDS A NEW VISION FOR PHARMACY INTO THE 21ST CENTURY

Keynote Address Delivered At The 1998 Annual General Meeting Of The Pharmaceutical Society Of Ghana At The Auditorium Of The University Of Cape Coast On The 17th September, 1998.

By Dr. Lawrence Honny

Introduction

I greatly appreciate the honour and opportunity to present this Keynote address. I can assure you that I have the highest regard for the Pharmaceutical Society of Ghana as a society and for its members for making it so strong and relevant to the pharmacy profession.

The topic for this conference could not have been more appropriate. This is an era of visions and dreams in Ghana spearheaded by Vision 2020. Accept my congratulations for your readiness to dream about your profession in a such bold way.

It is extremely fortunate that stakeholders and practitioners spanning the entire spectrum of the pharmacy profession are all represented here: community and hospital pharmacists, medical representatives, academics, industrial pharmacists and pharmacists administrators. There is, as I can see, more than sufficient capacity to effectively confront the many inevitable challenges that lie ahead for Pharmacy in the next century. To peep profitably long into the future landscape of any profession will require perhaps more than just a horoscope, may be even some powers of clairvoyance.

What I have elected to contribute to this process of stargazing therefore, is to provoke thinking by making a few paintbrush marks of my vision, based on three major questions. First, What will be the major sources and direction of changes affecting pharmacy? Second, how are the service and roles of pharmacists likely to evolve in response? And Third, how will the Society influence the shape of things to come?

THE PRACTICE OF PHARMACY AND THE ROLE OF THE PHARMACIST

Pharmacy is both a science and an art, concerned with the collection, preparation and standardisation of drugs. The man who expresses a juice from leaves to apply to a wound is in fact practising it. So we have a situation in which even middle school leavers with no special training who operate chemical shops believe they can also practice pharmacy.

The advisory role of the pharmacist is likely to become more intensive as the population gets more sophisticated about its health and the implications of drug actions. The knowledge base of practitioners might therefore need to be expanded through regular refresher courses and drug management programmes.

Responsibility for the control and regulation of traditional or herbal practitioners will also become very important. The Society would need to consider the powers and mechanisms by which community pharmacists can play an effective supervisory role and protect the nation from dangerous practices and medication.

The pharmacist is often the first point of contact with the sick person who is not yet incapacitated from moving about. The perception is that the long wait to see a nurse and then a doctor before a pharmacist is not necessarily justified, and that the

pharmacist has enough knowledge of the related professions.

The general public visualises the pharmacist as generally able to determine conditions of debility and prescribe appropriate medication. This is a perception which projects pharmacy as a special point of reference (call it a health supermarket) where people seek medication and advice on how to use drugs.

This rôle, also makes the pharmacist, especially the community pharmacist rather than any other health professional, potentially the main target for bringing about improved health of the population. This consideration should in my view, inform any thoughts about shaping a vision of the profession in the next century.

THE SUPPLY AND AVAILABILITY OF PHARMACISTS

The likely availability of pharmaceutical service can be gleaned from the historical growth rate of pharmacists. Over the 27 years between 1961 and 1998, about 1537 pharmacists were registered in Ghana. This yield's roughly 55 pharmacists a year, or a growth rate of 4% p.a. which is only 1% more than the population growth rate.

If this supply remains the same, there would be less than 3000 pharmacists by the year 2020. This is not likely to significantly reduce the population per pharmacist ratio from the current level of about 12,000:1. Is this an appropriate ratio, and will it satisfy the objectives of the national health policy? Current trends suggest that the future annual output of pharmacists from the UST could vary between 70 and 100: so the actual growth rate of pharmacists could be between 5% and 7% in the next few years.

These estimates, being beyond the population growth rates mean that the ratio of pharmacists to population could improve. The issue, however, is to see that this growth would be qualitatively capable of supporting the dream of a rapidly modernising economy with high GDP growth rates. The expected growth of the service sector as envisaged in Vision 2020 is between 8% to 10%.

There are however, two aspects of the growth of pharmacists and pharmaceutical service needing particular attention in the future namely, the occupational and geographical distribution of professionals and services.

OCCUPATIONAL AND GEOGRAPHICAL DISTRIBUTION OF PHARMACISTS

The over 1,500 pharmacists are distributed roughly as follows: 55% (721) in community pharmacy; 22% (282) in hospital pharmacy; and roughly 3%-4% in each of the remaining practices namely, industry, regulation and administration, academics and research, with about 10% (123) at large. Thus more than half of the pharmacists (721) are in community pharmacy, and about one-third are in hospitals. These two areas account for over three-quarters of the occupational distribution. Only 4% are in industry,

which explains the low domestic production and large importation of drug experienced in the country.

Should this trend continue into the next century, approximately 1,100 of the estimated 2,000 who will enter the profession from now till the year 2020 would be community pharmacists, and 660 would be hospital pharmacists. Only about 80 would be in industry, and there would be roughly the same numbers in the other occupations. It is up to this conference to determine whether this would-be an appropriate and desirable occupational spread to maintain, and determine how it is to be changed, if it must be.

A major source of concern must be the relatively small numbers that might end up as industrial pharmacists and researchers. Without a significant upsurge in these occupational areas, the weakest link in the chain of the delivery of pharmaceutical services might remain the foreign exchange consuming and import-dependent character of the sector.

To remedy this situation, the Society might wish to consider how to intensify training and research into locally available raw material resources for domestic manufacturing activities, to which we shall return shortly.

In terms of geographical distribution, it can be predicted that of those who will become pharmacists before 2020, about 960 would end up in Greater Accra, and 660 in Ashanti, totaling nearly 1500 for those two regions alone.

The Ghana Statistical Service's Report On Rural Communities in Ghana (1993) stated that only 4% of rural households live in communities where there is a pharmacy, and that only 36% have access to a pharmacist or pharmacy within ten miles. There is a major challenge to the profession in this area to promote a more equitable spread of services.

It is the goal of health sector delivery in Ghana to rationalise the spatial distribution of all types of services and ensure an adequate complement of health personnel for all districts. Therefore the highly uneven distribution of pharmaceutical services, with 80% in only two regions of the country should be addressed.

MANAGEMENT OF COMMUNITY PHARMACIES

It is quite easy to conjecture that as we enter the next century the pharmacy as a place for dispensing drugs will assume more and more the character of a health supermarket and information center where people will seek answers to a variety of health- and drug-related questions, and also seek alternatives to modern drugs.

In particular, pharmacies located in relatively depressed areas will find that they will be relied upon to undertake more work treating cases than dispensing drugs. In other words, thought should be given to aligning the treatment of basic diseases with the practice of (community) pharmacy to make it more useful to the public.

The idea of group pharmacies could also develop as a management option. It could have several implications and bring about advantages including shared costs, knowledge and management experiences.

These prospects presage an expanded role and knowledge base for practitioners. Not only will the

changes call for higher levels of professionalism, they may also lead to higher standards of qualification and flexibility.

From the very onset, efforts should be devoted to the elimination of the apparent sources of discomfort between the physician and the pharmacist so that within reasonable limits, the latter can be free to diagnose and treat certain conditions.

PHARMACY IN THE GLOBAL ECONOMY

The growth of Global business will also affect the commercial environment very drastically. If manufacturers integrate into the retail and distribution trades, others may be affected. Small retail pharmacies may collapse under the pressure of pan-pricing by conglomerates and larger businesses. Clients will of course be happy that they will receive more value for their money.

As a result of improved communication and information flow, clients can be expected to ask more and more questions about what will happen when they take certain drugs, and learn more about their social and legal rights in their relations with professionals.

The impact of global business will however very much be to the disadvantage of the growth of pharmacy in the rural economy because only large retailers will survive these developments.

Community pharmacists who depend almost exclusively on retailing may find their earnings disappearing slowly, along with their claim to

friendship with the human race. The time may soon arrive when some community pharmacists will begin to feel that the pocket is more important than the spirit.

The implications are that training in the future should provide compensating variations for flexible choices in professional practice, so that the motto of the profession can be brought fully to life. How will the profession evolve to meet these challenges? What strategies will it engage that will effectively address these potential developments?

Foreign investment in domestic pharmaceutical manufacturing is at present lower than is reasonable.

If the influx of medicaments from high technology countries is allowed to stifle the growth of domestic capacity, the sector as a whole will fail to research and innovate. It will remain merely a market extension of foreign production, with rising proportions of professionals operating as marketing representatives of foreign firms whose activities will continue to weaken the foreign exchange financial base of the economy.

DOMESTIC MANUFACTURING

The next century should perhaps endeavour to reverse this scenario, with an appropriate number of pharmacists in the productive sector, and show this country with a significant proportion of domestic production in the value of pharmaceutical sales.

The recent Asian economic experiences have somehow demonstrated that it can be quite unsafe to rely too heavily on outside capital because it can sometimes be frivolous and flect-footed.

The necessary research and linkages between the local resources and production will need emphasis. A government committed to the development of domestic industry should have little difficulty in backing the private sector and facilitating its entry into the activities necessary to pursue policies along these lines. One of the tasks I hope this conference will address is precisely this: To propose to Government policy initiatives to support a vigorous growth of the pharmaceutical manufacturing industry. When the profession is contextualised in these terms we can speak of pharmacy for development in the next century.

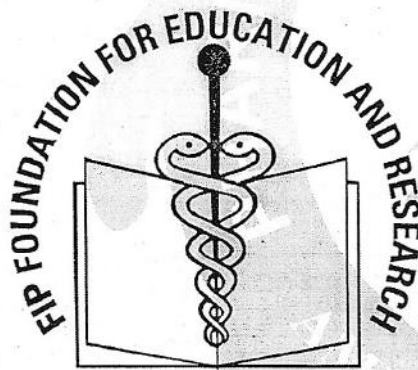
TECHNOLOGY AND CHANGE

Perhaps the greatest factor likely to influence the course of the profession will be Computer Technology.

Through the use of computers, pharmacists will be able to accumulate large amounts of data, store customised prescriptions, maintain and regularly update lists of drugs, their sources, prices, actions and other characteristics.

They will have access through the Internet to a large volume of information which would otherwise have been obtained at great cost. Practitioners will be able to communicate with each other much more quickly and less expensively. Perhaps even clients and patients will be able to obtain professional advice through this means.

All these developments will introduce strategic changes to the practice and the delivery of services. It is likely that on the one hand, less contact will be



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made with clients and patients on a personal basis. On the other hand however, the expanding use of computer technology will invite familiarity with information management.

Technological change and global economic trends will also have an important bearing on how the human resources should be developed to become professionally more competent.

Most of these developments, however, are likely to occur in the rapidly urbanised sector of the economy. If the economy maintains its dualistic character, then developments in the peripheral economy i.e. rural areas will lag substantially behind and small, individually-manned community shops without improved technologies will survive the threat of globalisation and modernization, and persist for several decades.

TRAINING FOR HIGHER LEVELS OF PROFESSIONALISM

Changes are also likely to occur in the environment of training, and perhaps Laptops will become a common companion for university undergraduates. The need to regularly upgrade software programmes could make pharmaceutical training initially expensive. On the other hand access to IT (Information Technology) methods will substantially reduce reliance on library books and professors.

The training of pharmacists will have to reflect market trends and future professional needs. More emphasis might be needed on the packaging of herbal medicines, communication, business methods and marketing. The Society will provide feedback to the universities on existing and potential trends in the profession, design and maintain standards of qualification and conduct for different occupations and practices within the profession, and to transmit these to the relevant training institutions.

THREATS FROM RELATED PROFESSIONS

Peddlers and untrained people who dispense drugs constitute a special threat to pharmacy and might pose an even bigger one in the future. Instances abound where the pharmacist is called upon to salvage a dangerous situation created by the careless dispensing and handling of drugs by such untrained people. I suspect that the fight for economic survival will attract more untrained people into the sale of drugs, and thus exacerbate this situation.

With time, it can be expected that the already tenuous traditional boundaries which demarcate the different professions in medicine and pharmacy will become even more obscure. Parallel professionals, especially doctors and nurses, are likely to practice more and more aspects of pharmacy. Nurses may, for example, seek minimum prescription rights, and pharmacists may be forced to do a fair amount of diagnosis.

The public is not likely to resent these developments because of the potential advantages to be derived in terms of easier and more cost-effective access.

Therefore the Society, while emphasising clinical pharmacy, might consider what levels of flexibility and compromise would be appropriate.

New Local Challenges In the Orientation Of Pharmacy Practice

As a result of the move towards natural rather than synthetic drugs, it is possible that increasing attention will be paid to herbs and herbal



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concoctions. It is common knowledge that this area is almost exclusively the preserve of traditional healers who have constantly traumatised professionals with treatments apparently rooted in, or facilitated by, the mystical properties of certain herbs.

This rather exciting combination of herbs, mystics and health is attracting growing approval, admittedly mostly, but not exclusively, from the less well-informed. It is at the core of the phenomenal growth in the so-called syncretic churches and spiritual healing centers where religion is used as a smokescreen for weird pharmaceutical practices.

The role of pharmacy in preventing such misapplication of drugs is considerably weakened by a lack of understanding of the claims to the mystical capacities of vision-producing, psychedelic drugs. This brings us to the role of Traditional Herbal Medicine.

TRADITIONAL HERBAL MEDICINE (THM)

THM received perhaps its biggest boost in the country with the landmark publication of the Ghana Herbal Pharmacopoeia (GHP) in 1992. That publication notes that drugs are too expensive, and that their use relies on infrastructure of clinics, hospitals and personnel, which are difficult to make universally available. It is reported that the percentage of populations in developing countries who depend on Traditional Medicine is between 60 to 90.

Furthermore, in Ghana, "traditional doctors" or herbalists are abundant (about 1 to every 400 people), compared to allopathic or orthodox doctors (about 1 to every 26,000 people). This situation signals a major new thrust to pharmacy in the coming century.

How ready is the profession to salvage itself and innocent victims from captivity of careless and dangerous use of drugs in the next century? What

will the society do to promote the collection and analysis of plants, and pharmaceutical chemistry in general, so that the vast repository of materials and substances with medicinal properties can be more effectively tapped?

HEALTH FOODS AND EXERCISES

At the other end of the spectrum, there is a trend development towards a reliance on health foods and physical exercises as a means of maintaining the health, instead of depending on medicaments. People are becoming better aware of the potential value and relative safety of employing natural remedies. These factors will also affect the profession in a significant manner.

WOMEN IN PHARMACY

Women have the special quality of bringing the feminine image and touch to the practice. Many patients, especially the aged, put a high premium on the services they receive from female practitioners, because they are often in need of sympathy and tenderness which can also alleviate conditions of illness due to pain, and eliminate the need for medication. This special quality of service will become more important as the life expectancy increases, and modernisation raises the level of social and economic stress on the population.

Against this background, the increasing numbers of women in pharmacy could indicate that they are likely to affect the nature and outlook of the profession in future in fundamental ways. They may, for example, provide better natural targets for training in geriatric treatments.

The useful initiatives of the Lady Pharmacists Association of Ghana (LAPAG) provide evidence of the increasing importance of gender to the profession. The role of women might therefore witness a more vigorous growth in the next century and will be needed to sustain and extend the "human face"

that the profession so proudly stands for.

Gender recognition should also enhance the professional status of women. For example, it has been observed that the upward mobility of women as a group is impaired by the family and social responsibilities associated with their biological status. In what ways can the Society protect its women to promote its professionals?

FRIENDS OF THE HUMAN RACE

In an era in which surviving vigorous competition and achieving maximum profits from investments are the hallmarks of success, giving practical expression to your Motto of "Friends of the Human Race" could become a nuisance. Yet it would be an irreparable embarrassment to the dignity and character of pharmacy if its services lacked a humane and compassionate feel.

In the years to come, the profession would need to constantly revisit its Motto, remembering that the very meaning of development has now evolved away from prosperity-based conceptions to put the human being at the center. Without denying the importance of economic viability, the profession might be encouraged to increasingly reward dedication and service to mankind.

LEADERSHIP ROLE OF THE SOCIETY

The Society will remain the main forum for influencing the future of pharmacy. Its leadership role will lie in identifying the strengths to promote, the weaknesses to eliminate, and the linkages to forge within itself and outside. The homogenous character and common institutional origin of its membership provide it with a springboard for progress.

The recognition of the need to advance pharmacy while considering the interests of other professions

will assume increasing attention. It will require invigorating structures within the Society to promote appropriate policies in the areas of concern. Management needs at various levels and the formulation of relevant policies for training and professional development will become major preoccupations.

LEADERSHIP ROLE OF THE PHARMACY COUNCIL

The forum for brain-storming on the issues I have raised will be conferences like this. The cutting edge for reforming the profession will however be the Pharmacy Council. Implementation, coordinating, monitoring and control activities will become very much more complex, and the challenge of periodically upgrading the levels of certification and qualifications at successive levels of the profession will also rise in sophistication.

TIME SCALE FOR CHANGE.

Needless to say, the rate at which these changes will occur will depend on how quickly the economy grows. Faster changes in the profession will take place if the general levels of productivity are high in most sectors. In that case, perhaps most of the predicted changes could be experienced sooner rather than later in the century.

I must confess, however, that on this, I am not such an optimist, because there is often a missing link between vision and reality in this country, between wishbone and backbone in pursuing policy objectives. As late as 1993, and in spite of the conditions of health delivery and access then, it was still pretended or believed that the objective of Health For All By The Year 2000^o was achievable.

If this last observation sounds like a pessimistic

note on which to resolve this address, then may I suggest that we all remain optimistic about the weather, but nevertheless carry umbrellas. It is far easier to be wise after an event than to pick winners in advance.

CONCLUSION

In conclusion, my horoscope and sixth sense have led me into thinking that the next century will present challenges to pharmacy concerning its occupational growth and structure, management and professional needs. These challenges will demand reorientation and retooling of pharmacists and pharmaceutical services to meet the responsibilities of the profession, and satisfy the expectations of all stakeholders.

Businesses will be compelled to adopt harsh cost-cutting measures to survive, paying maximum attention to research and to human resource development. Survival is likely to come about mainly through deploying specialised yet flexible knowledge, improved understanding of the socio-economic environment, greater commitment to professional ethics, and the acquisition and application of sharper business, marketing and commercial skills.

The Society has a major role in providing leadership and identifying the issues and building blocks for the future. I know that you will take up this challenge with resolve at this conference and enormously fertilise the vision I have presented.

My desire for you in the next few days and the future, is that you will successfully maintain your age-old reputation as "the physicians of the poor" and project pharmacy into the next century as:

"a people-oriented and humane service, with professional excellence in all its occupations to support the health of Ghanaians".

I wish you the best of luck and an enjoyable and highly productive conference. ●

Thank you.



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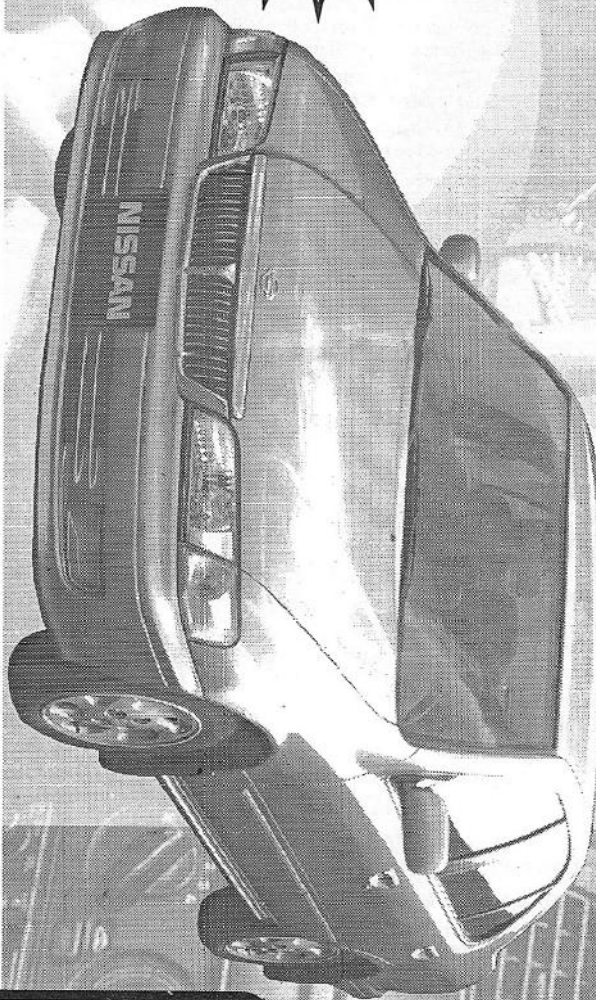
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CAPACITY BUILDING FOR THE ENHANCEMENT OF THE PRACTICE OF PHARMACY IN GHANA- A GENERAL PRACTICE PHARMACIST'S VIEWPOINT PRESENTED AT THE 1998 ANNUAL GENERAL MEETING OF THE PSGH, CAPE COAST

By Frank Amoako Boateng

It is indeed a pleasure to be contributing to this symposium on this all important subject: "CAPACITY BUILDING..."

For some time now this has become a cliché of the politicians and civil servants. It is my hope though that as we discuss this, our conclusions will not be weighted by politics but would be applied "towards the new vision for Pharmacy in the 21st Century".

To the subject, the first thing one will want to look at is which capacity? When the politicians mention Capacity Building, the counter component is "Vision 2020". This supposes that for anyone to talk about building capacity, there should have been identified, a vision, an objective, or some goals. As far as I am aware, the GPPA does not have any vision yet, however, we do have some objectives, and as a start, I shall want to review these objectives in the light of which I should want to see our capacities built.

My presentation is therefore going to take us through:

The Objectives: GPPA; NATIONAL PRIORITIES-MOH, M.T.H.S.

ELEMENTS FOR BUILDING UP

*Infrastructure
Personnel
Politics*

CONTROLS FOR THE BUILDING OF CAPACITY.

a) GPPA OBJECTIVES

The Objectives of the GPPA are set out in article 2 of its constitution:

- i. To work for the protection and advancement of General Practice Pharmacy.
- ii. To ensure that relevant laws affecting General Practice Pharmacy are implemented effectively.
- iii. To ensure fair distribution, control and handling of drugs by qualified pharmacists.
- iv. To organise continuing education programmes periodically in line with modern trends of the practice of pharmacy.
- v. To do such things as are conducive to the practice of the profession.

The constitution enjoins us to build capacities for the advancement of General Practice (GP), ensure that relevant laws affecting GP are implemented (monitoring and lobbying all agencies responsible for issuing laws and regulations), ensure fair distribution, control and handling of drugs (negotiating, monitoring), periodic continuing education programmes in line with modern trends of pharmacy practice (information) and any such thing that is conducive to the practice of the profession (management, entrepreneurship, IT, standardisation).

I shall be picking the issues up again after I have run through the other aspects relating to our National objectives for which capacity should be built.

b) NATIONAL PRIORITIES - MOH, Medium Term

Health Strategy (MTHS)

As you are all aware, GPs provide pharmaceutical service in the communities in which they are sited. The expectations of the communities in which we are sited are sometimes higher than the pharmacy laws allow us to operate. To say the least, the communities perceive a pharmacy as a small clinic where they could receive medical care without paying consultation fees; indeed I have heard it said a number of times that "today I have no money to go to the hospital".

In as much as we have to keep to the laws that regulate our operations, it is my view that, interventions could be provided by GP pharmacists in areas of public health (even though some would have their reservations). An initiative has already been provided by the CIDA funded West Africa Project on AIDS. I do hope that every GP has availed himself to this opportunity.

Even for this initiative, it is worth noting, Mr. Chairman, a comment in the introduction of the project document which is not so complimentary, which however, gives the perception of the funding agencies and perhaps other institutions towards us: "Throughout Africa public health projects have been relatively uncomfortable with the idea of working with pharmacists because of their commercial characteristics. The USAID perceived an ambiguity in the law governing activities of Pharmacists". This may in part be due to the ambiguity in the contemptible clause "... simple ailments of common occurrence...", Act 489, 40 (1)(b). We need to build up clear identities for ourselves.

Let us take a look at some of the priority objectives of the MOH in the MTHS

PRIORITIES FOR HEALTH INTERVENTION

These are priority service interventions which should be available in all health centres :

1. Immunisation through EPI
2. Reproductive Health Programme: Family Planning services, Essential and Emergency Obstetric Care
3. Prevention and control of Infections: Cholera, CSM, Yellow Fever
4. Health Protection and Promotion: Bednet use, Nutrition and Diet Alcohol, drugs and tobacco STDs/HIV, Hygiene and Sanitation.
5. Prevention and Control of Micronutrient deficiencies: Vitamin A, Iron, Iodine.
6. Management of selected endemic diseases: Malaria, Respiratory Tract Infection (RTI), Tuberculosis, Leprosy, STD, Diarrhoeal Diseases, Guineaworm, Onchocerciasis, Shistosomiasis, Yaws, Buruli Ulcer, Hypertension and Diabetes.
7. Emergency care for accidents and trauma.
8. Even though these interventions are addressed as priority services for health centres, GP pharmacists could well

handle quite a number of these interventions. They come along with specific targets, which is to show that our collective performance can be measured. If we indeed can intervene, then we certainly will require to build up our capacities them all in the support for the improvement in National Health.

ELEMENTS FOR BUILDING UP

I have tried to categorise the elements under the 3 aforementioned headings i.e. Infrastructure, Personnel, and Controls.

a) INFRASTRUCTURE

For us to be able to measure up to the objectives listed above, there is the need for us to have the right infrastructure that would support our activities.

PHARMACY PLAN

A clearly laid out plan of the pharmacy with a provision for a counseling area should be required just as running water is required as prerequisite for registration.

WHOLESALE INVENTORY

We should be building up towards wholesales with very wide inventories which makes it easy for retail pharmacies to be able to shop from one source rather than moving from place to place. This has the obvious advantage of reducing the time for which community Pharmacists spend commuting rather than providing the needed service in their pharmacies.

RETAIL INVENTORY

We should be working towards reducing retail inventory to about 1-2 months stock levels (the shorter the better). This will help reduce the level of items that expire on our shelves and also facilitate the extension of facility by the wholesalers to the ever increasing number of pharmacies. How can we do that?

INFORMATION TECHNOLOGY

We are in the age of Information Technology yet it is sad to mention that less than 10% of pharmacies are computerised. It is my view that computerisation should also be a matter of course if we are to match up with the challenges for which we should build capacity. The millennium bug notwithstanding, we need the computer to help in our all important tasks: inventory control; stock management; improvement of communication between ourselves; internet access, disposal of excess stock; VAT management; accounting; distance education, etc.

We may have to seek a suitable financing arrangement to make it possible for every pharmacy in the country to own a PC (personal computer) with a point of sale terminal. This is currently being negotiated.

DISTRIBUTION OF PHARMACIES

To provide the services outlined by the MOH, it is imperative that the distribution of pharmacies is looked at more critically. This essentially calls for a more rational approach for siting. Could we in anyway describe the current distribution of pharmacare in the country as rational? Certainly not. It is my view that together with the regulatory authorities, clear objectives as to the number of pharmacies per a given population should be set, and capacity built in the direction for the provision of good service.

b) PERSONNEL

The fact that the computer should be one of the basic tools in the pharmacy enjoins all pharmacists to be computer literate. The fact that a counseling area should be provided in a pharmacy presupposes that we should be counselors (and indeed good ones), this in effect means that we should be good communicators and understand the subject areas on which we counsel. The crux of building personnel capacity is education.

COMPUTER LITERACY

We need to be taught how to use the computer.

CURRENT HEALTH ISSUES

We need to be educated and informed on current health issues as they come up. How many of us would be able to give adequate counsel on VIAGRA? How many of us will be able to give adequate information on Buruli Ulcer? How many of us will be able to provide adequate counsel on CSM?

The MOH in its MTHS already gives us an

abundance of subjects on which we have to be informed about and some treatment protocols for which we need to build up to. It is usually sad to observe, most of the time by chance, that the MOH is promoting a certain concept and GP's both Clinicians and Pharmacists hinged on to another. Sometimes you observe the variance even in the MOH setups.

Let me take a typical example, about 3 -4 years ago, maybe more, the MOH started to promote the single daily dosage regimen for chloroquine in malaria (the 4:4:2 regimen). This I believe was a result of some research into treatment failures as a result of non-compliance to the traditional dosage regimen. To date we still have the majority of local industries presenting with the traditional regimen. We find similar scenarios in the management of diarrhoea and the promotion of exclusive breast feeding. I can go on and on but it is clear that we have inadequate capacity with regards to our relations with the MOH.

ENTREPRENEURSHIP DEVELOPMENT

The GP pharmacist is also a business person (or would eventually be). It may therefore be prudent that we build capacities in such areas as

- Budgeting,
- Management,
- Finance,

for us to appreciate and understand the operations of our businesses.

SECOND LANGUAGE

In business, it might not be far-fetched to strike business arrangements with the French. It may be worth the while that we also start looking at the

French language.

I am sure it has become clearer by now that the summary of all Personnel issues in capacity building is Information, Education and Communication. This is the only way by which our capacities as General Practitioners can be built to support National and Association goals.

It is my expectation that the Pharmacy Council will harmonise with the PSGH and the GPPA for the provision of courses which will further the achievement of our goals.

POLITICS

In a democracy such as ours, the only way we could intervene in laws which might negatively affect our performance is to be able to lobby. That could be an art, but certainly it would mean understanding and appreciating the fact that some interventions would have to be made at most appropriate times. We need the political interventions to be able to provide a fairer distribution of pharmacies for the provision of the kind of pharmaceutical care we have aimed at. We need a lot more of Pharmacists in politics.

C) CONTROLS FOR THE BUILDING OF CAPACITY

It is important to note that, without building good control mechanisms every programme will come to naught. This may fall in the domain of other speakers but it is my opinion that the controlling bodies i.e. The Pharmacy Council, the Food and Drugs Board, the MOH, the PSGH and the GPPA should learn to work more closely for the good of the profession of Pharmacy.

CONCLUSION

We can only enhance the Practice of pharmacy in Ghana if all concerned will work harmoniously towards generally agreed goals. As General Practitioners, these goals can be summed up as Infrastructure build up, improvement in Personnel qualities and objectives and political awareness all in the frame work of effective and appropriate controls.

Thank You. ●

S.E.C. CALLS ON MINISTER OF HEALTH

A standing Executive Committee delegation led by the President, Mr. Dela Ashiabor called on the Minister of Health, Mr. Samuel Nuamah-Donkor at his office on Wednesday June 30, 1999. They were accompanied by the Chief Pharmacist Mr. Emmanuel Fofie.

The purpose of the visit was to express gratitude and thanks to the Minister and the staff of the Ministry of Health on behalf of the West African Pharmaceutical Federation (WAPF) and the Pharmaceutical Society of Ghana for the support and financial assistance extended to the said bodies during the organization of the 12th General

Assembly to the quest for developing a sustainable health care delivery in the West Africa Subregion. He emphasized that the role of drugs in the health care system places pharmacists and their profession in a unique position such that they deserve appropriate recognition and support.

It was therefore in this light that the Ministry considered providing the necessary financial assistance to ensure a successful meet under the theme "Promoting the Rational Use of Drugs". Other members of the Delegation were Mr. Dan Sekyere Marfo, The Honoring General Sec. Mr. John Arthur the Vice-President, Mr. Francis Aboagye-Nyame, the Asst Hon-Gen secretary and Mr. S. N. Tenkorang, the Executive Secretary all of the Pharmaceutical Society of Ghana.

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TOWARDS IMPROVED SOCIETY SPECIAL GROUPS RELATIONSHIPS

A meeting has been held in Accra to seek solutions to the seething problems confronting relationships between the PSGH and her wings and interest groups.

The meeting which was called at the instance of the President took place at the Education Hall of the Ghana Museums and Monuments Board on 30th June, 1999.

All the Executives of the wings and interest groups were represented. These are:

1. Government and Hospital Pharmacists Association (GHOSPA)
2. General Practice Pharmacists Association (GPPA)
3. Industrial Pharmacists Association (IPA)
4. Association of Representatives of Ethical Pharmaceutical Industries (AREPI)
5. Lady Pharmacists Association of Ghana (LAPAG)
6. Academic and Social Pharmacists Association (A & SPA)

Also represented was the Executive committee of the Greater Accra Branch of the Society.

In his opening remarks, the President observed that over the past two years relationship between the society and her special groups have not been as expected. He stated that some of the groups had engaged in such activities as have tended to stall the

programme of the Standing Executive Committee. He added that the meeting was meant to be a problem-solving initiative and urged all present to co-operate in their contributions.

He observed that the wings and interest groups have not been very forthcoming in their relations with the parent Society. He informed the meeting that the Society has been restructured in all respects and called for total co-operation and the co-ordination of efforts. The President cited instances of non-co-operation and dealings without due reference and notification to the Standing Executive Committee. From the frank discussions that ensued members acknowledged the fact that there were problems which required urgent redress if the Society was to move forward.

Among the areas identified as needing more cooperation are:

1. Continuing Education Programmes;
2. Problem identification and solving at the wing level;
3. Regular meetings and interactions
4. Communications
5. A demonstration of interest in each other's activities;
6. Leadership recognition and interest.

Responding to the concerns expressed at the meeting, the President recognised that

communication has been a real problem and pledged that modalities would be fashioned out to ensure regular interactions among all interest groups.

The president conceded that the Pharmacy Act mandates the Pharmacy Council to organise post-qualification education for pharmacists. He however noted that the Society could also engage in Continuing Education activities for its members.

In line with this development, a joint Education Committee has been proposed for the PSGH/ Pharmacy Council.

On the question of wing group representation on the Society's Education Committee, the President accepted that the recommendation was a laudable one. He assured that the suggestion would be passed on to the in-coming Standing Executive Committee for consideration.

The meeting further recommended orientation sessions for new Executives of all Branches and special groups of the Society. It was recognised that no effort need be spared in promoting the adherence of the relevant constitutional provisions which guarantee harmony among all groups and the Society.

The president stated in his closing remarks that the purpose of the meeting had been achieved in that the gathering identified the problems that hampered progress; and areas of co-operation and remedies were proposed as well. The President further announced the national elections at the upcoming 1999 AGM/Conference to be held in Accra in September. He called for a large field which was necessary for ensuring vibrant elections.

The meeting lasted one and half hours and participants expressed heartwarming satisfaction with the outcome. ●

Executive Secretary

THE PHARMACY HOUSE PROJECT WHAT'S UP!

The Pharmaceutical Society of Ghana has been in existence since 1935. Since its inception its Secretariat has moved from one end of the city of Accra to the other in rented accommodation. In the course of time, various attempts were made to put up a house for the Society to be used principally as the National Headquarters. Various schemes were adopted, none of which achieved the desired goal. Not even a bonafide root title to land for the project was secured. However, in recent times the same idea has come back more forcefully and the approach has been more purposeful.

OBJECTIVES

The general objectives of the project are:

- (i) To raise funds to buy a plot of land big enough to meet the purpose.
- (ii) To come up with programmes and strategies for raising fund for the development of the the "Pharmacy House".
- (iii) To manage the construction of the entire project.

PROPOSED STRUCTURES

The following are suggested as part of the project:

- (i) An auditorium to seat 1500 people and other committee rooms.
- (ii) An office block comprising a National Secretariat, a library, stores and rental office units.
- (iii) A 50 - bed hostel.
- (iv) Outlook leisure areas.

- (v) Car park for 500 cars.

SOURCE OF FUNDING

The project is estimated to cost about two billion cedis at current levels. The sources of funding envisaged are:

1. Own funds:

Members of the Pharmaceutical Society of Ghana by a general resolution in 1996 have committed themselves to a levy of One Hundred Thousand Cedis (¢100,000.00) per year till the project is completed.

2. Externally Solicited Funds:

The Pharmaceutical Society of Ghana would solicit funds from external fund providers (possibly on-shore and off-shore) in the form of:

- * Equity
- * Loans
- * Donations

3. Short-Term Financial Investments

Monies accruing to the project fund would be invested in short-term financial instruments.

PROGRESS

* A land big enough for the entire project is being acquired along the Spintex road adjacent to the MPDI project and opposite the Tema Texpo '98 grounds.

* Documentation.
A concept paper giving background information on the project has been developed.

* As at June, 1999, an amount of one hundred and seventy million cedis had been collected from members of the Society. Most of this has been invested in treasury bills and other financial instruments.

* The Society is in serious discussions with a Fund Management Company on matters concerning funding of the project.

* A draft time-activity programme for the entire project has been presented to the National Council for consideration.

PROSPECTS

The dream is for the Society to be an equity holder in a commercially viable venture called the Pharmacy House. The project, when completed should not only be self-financing in terms of management and maintenance, but should be profit yielding. It is proposed that the completed project would be put under the management of a competent property management firm technically independent of the Pharmaceutical Society of Ghana.

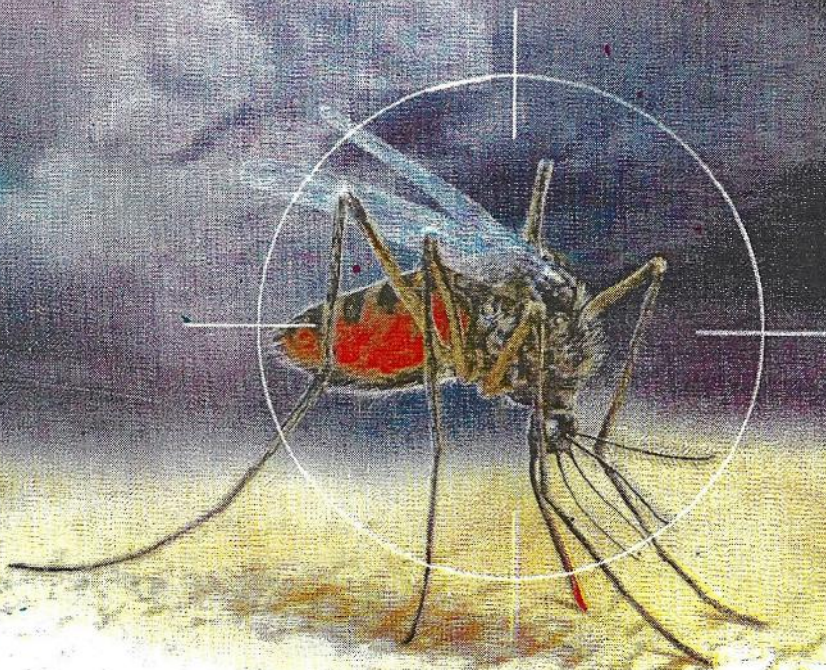
The expected income can be derived from user fees in the form of rentals and lettings. It is hoped that equity holders will earn returns on their investments. ●

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(HON. GEN. SECRETARY) - PSGH

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12TH GENERAL ASSEMBLY AND SCIENTIFIC SYMPOSIUM OF THE WEST AFRICAN PHARMACEUTICAL FEDERATION (WAPF), 20TH -24TH FEBRUARY, 1999. ACCRA, GHANA

INTRODUCTION

The 12th General Assembly and Scientific Symposium of the West African Pharmaceutical Federation (WAPF) took place at the Miklin Hotel and the Ghana Registered Nurses' Secretariat/Hotel in Accra, Ghana, from February 20th - 24th, 1999 under the theme "Toward Developing a Viable Drug Policy in the Sub-region." Delegates from The Gambia, Liberia, Nigeria and the host country, Ghana, participated in the General Assembly, while delegates from Sierra Leone, were unavoidably absent.

The Deputy Minister of Health, Dr Moses Adibo, on behalf of the Minister for Health, Hon. Samuel Nuamah-Donkor welcomed participants to Ghana and the assembly. The Minister bemoaned the situation where rural folks of the sub-region lacked access to effective, and affordable drugs and urged participants to help impart quality to traditional herbal medicine.

The official opening ceremony was performed, on behalf of the President of the republic of Ghana, Ft. Lt. J J Rawlings, by Dr (Mrs) Mary Grant, Member of the Council of State. He commended member countries for working towards harmonising their drug legislation and practice.

COMMUNIQUE

The assembly deliberated in-depth on the theme and:

- i. Bearing in mind the desire of governments of the sub-region to make healthcare accessible to all of their peoples;
- ii. Realising the importance of a viable drug policy in the sub-region;
- iii. Concerned about the rising cost of drugs

in the Sub-region;

- iv. Dissatisfied with the level of knowledge about proper use of drugs by the lay public,
 - v. Concerned about the increasing incidence of fake and substandard drugs on markets of the sub-region;
 - vi. Recognizing the important role herbal medicines play in the lives of our peoples;
- Appealed to:**
- a] Governments of the sub-region to be committed to the concept of rational drug use as incorporated in their national drug policies and ensure a multi-sectoral approach to the implementation of all programmes aimed at promoting appropriate use of drugs.
 - b] Member countries to ensure the harmonisation of drug laws within the sub-region and their enforcement.
 - c] Pharmacists to constantly update their knowledge on drugs and upgrade their skills in Information, Education and Communication (IEC) delivery.
 - d] Government and member Associations to establish Drugs Information Centre (DICs) to provide health professionals and consumers with objective and usable drug information.
 - e] Governments, where appropriate, to reduce or remove completely taxes on drugs and raw materials in order to make

them more affordable.

- f] Pharmacists to co-operate with herbal practitioners towards providing quality herbal medicine.

At the end of the proceedings, the following officers were elected to serve the Federation for the 1999/2001 biennium:

- | | |
|--|-------------------------------|
| Dr Mariatou T Jallow (The Gambia) | - President |
| Dr E. C Chidomere (Nigeria) | - 1st Vice President |
| Mr Nathaniel Cassell (Liberia) | - 2nd Vice President |
| Mr Ade J. P. Johnson (Sierra Leone) | - Secretary-General |
| Mr Momoudu K Cham (The Gambia) | - Assistant Secretary-General |
| Chief Supt (Mrs) J Addo-Atuah (Ghana) | - Treasurer |
| Professor (Mrs) C I Igwilo (Nigeria) | - Editor-In-Chief |

The Assembly expressed profound appreciation to His Excellency, The President, the Government and people of Ghana not only for the excellent arrangement put in place for the 12th General Assembly and Scientific Symposium, but also for the warm reception accorded the participants. ●

(Signed)
Dr Mariatou T Jallow
President, WAPF

SUMMARY OF PROCEEDINGS AND DECISIONS OF THE 36TH COUNCIL MEETING OF THE WEST AFRICAN PHARMACEUTICAL FEDERATION AS ADOPTED BY THE 12TH GENERAL ASSEMBLY MEETING OF THE FEDERATION HELD AT GHANA NURSES HOSTEL ACCRA, GHANA WEDNESDAY, 24TH FEBRUARY, 1999.

The 12th General Assembly and 36th Council meetings of the WAPF were held from 21st to 24th February, 1999 at Ghana Nurses Hostel and Pharmacy Council of Ghana respectively. The meetings were presided over

by the President, Professor K. Boakye- Yiadom. The following were the decisions of Council as adopted by the General Assembly.

DECISION 99.1. PUBLICATION OF DIRECTORY OF PHARMACISTS AND BOOK OF FELLOWS:

Council noted with concern, the prolonged delay in carrying out the above publication due to non-supply of the required information by some member countries. Presently, Sierra Leone and The Gambia are the only member countries that have responded positively to the request by sending the list of pharmacists and their contact addresses (including telephone and fax numbers) to the WAPF Secretariat. Sierra Leone still remains the only member country that has paid her assessed contribution towards the publication. Council therefore renewed its appeal to defaulting member countries to, at least, send the required information to enable the WAPF Secretariat carry out the publication without further delay.

DECISION 99.2. FINANCIAL AND MATERIAL SUPPORT FOR WAPF AND THE WAPCP

Council noted that the WAPF Secretariat had written a reminder letter for financial and material assistance to the Federation and its College, to Pharmaceutical Manufacturers Group of the Manufacturers Association of Nigeria (PMG-MAN) in July 1998. The response from the Group is still being awaited. Council also noted that The Gambia and Ghana were yet to supply to WAPF Secretariat, the names and addresses of pharmaceutical companies, donor agencies and organisations in their countries to enable the Secretariat solicit for financial and material assistance from such organisations. Council therefore appealed to these countries to respond positively to the request without further delay.

DECISION 99.3. FELLOWS IN DEBT:

The General Assembly (GA) in noting Council's report to it that some Fellows had persistently owed the Federation and its College in respect of Associate Membership Dues, Fellowship Fees, Establishment Fees and Cap and Gown despite repeated appeals to them to redeem these debts, directed that the WAPF Secretariat should send a comprehensive copy of the debtors list to local Chapters for necessary action. Sanctions against defaulting Fellows would be applied based on the report of the local Chapters, detailing those who paid and those who are still owing.

DECISION 99.4. CHANGE OF NAME FROM WEST AFRICAN PHARMACEUTICAL FEDERATION TO WEST AFRICAN POSTGRADUATE COLLEGE OF PHARMACISTS:

In noting the ratification of the establishment of West African Health Organisation (WAHO) by the ECOWAS Heads of States in 1998, and in order to harmonise the entry of pharmacists into WAHO with the other sister Specialised Agencies of the West African Health Community (WAHC), the GA resolved that the West African Pharmaceutical Federation (WAPF) (as a Specialised Agency of WAHC) should change its name to West African Postgraduate College of Pharmacists (WAPCP).

DECISION 99.5. MERITORIOUS SERVICE AWARD FOR OUTSTANDING CONTRIBUTION TO PHARMACY PRACTICE:

The GA noted the following pharmaceutical companies in Ghana which were

recommended by Council for the above Award:

- 1] Kanbross Chemical Industries Limited
- 2] Starwin Limited

The Award was made with the presentation of plaques to the companies during the Closing Dinner.

DECISION 99.6. CONTACTS WITH FRANCOPHONE COUNTRIES OF ECOWAS:

Council noted that since the Executive Secretary interacted with some members of the ECOWAS -Francophone countries that attended a conference in Praia, Cape Verde, no response has been received from them in terms of their intentions to collaborate with the Federation towards integration as a unit in entering into the WAHO. Council decided that the Federation should continue to encourage them to collaborate with the WAPF using every available opportunity.

DECISION-99.7. CRITERIA FOR FELLOWSHIP ELECTION:

Council modified criteria No. 1 under the above subject to read "Elected Fellows shall be pharmacists with not less than 15 years post-qualification experience or a pharmacist with postgraduate degree."

DECISION 99.8. STRATEGIC PLANNING:

The GA noted as reported to it by Council, the comments of Lady E U Ekaete, Country Representative for Nigeria that action had been initiated to formulate the strategic plan on "Challenges of Pharmacy Practice in the 21st Century" being the theme for the 11th General Assembly. The General Assembly however noted that the latest information on the establishment of WAHO had made it imperative for a stay of action on the matter pending the determination of the focus of the Federation in the new organisation.

DECISION 99.9. CAPITATION FEE:

The GA noted with commendation, the report to it by Council that Ghana pledged to pay her 1999 Capitation Fee at the venue of the 12th General Assembly. It also noted the payment made in December 1998 by Nigeria in respect of 1997 Capitation Fee and commended the country for her effort. Nigeria was, however, appealed to endeavour to pay for the 1998 and 1999 Capitation Fees as soon as possible. The Gambia was also commended in her effort to pay Capitation Fees up to 1998, with an appeal to the country to pay for 1999 at the shortest possible time.

DECISION 99.10. CONTRIBUTION TO WAPF/WAPCP BUDGET:

The GA took note of Council's report to it that member countries were yet to pay their assessed contribution to the above budget since 1997 till date. As a result, the amount contributable to the budget by each member country has accumulated over the years. To facilitate payment of the assessment, the GA noted the following compromise agreement reached by Council with Country Representatives:

- 99.10.1. 1997 budget contribution be written off for all member countries.

99.10.2. Member countries were given up to June 1999 to pay 50% of 1998 budget contribution.

99.10.3. Member countries were given up to December 1999 to pay 100% of 1999 assessed budget contribution.

99.10.4. The above concession would lapse if any member country failed to utilise the opportunity to pay all her assessed contributions at the end of December 1999, implying that any defaulting member country would pay 100% of the assessed budget contribution starting from 1997 to 1999.

99.10.5. Under the compromise agreement, each member country is to contribute the following amount to the budget:

| Country | 1998 | 1999 | Total |
|--------------|------|--------|----------|
| | \$ | \$ | \$ |
| Nigeria | 1583 | 791.50 | 2,374.40 |
| Ghana | 879 | 439.50 | 1,318.50 |
| Sierra Leone | 527 | 263.50 | 790.50 |
| Liberia | 281 | 140.50 | 421.50 |
| The Gambia | 246 | 123.00 | 369.00 |
| | | | 5,274.00 |

The GA took note of Ghana's pledge to pay part of her assessed contribution at the venue of the 12th General Assembly.

DECISION 99.11. SPONSORSHIP OF PHARMACISTS TO UNDERTAKE THE WAPCP FELLOWSHIP PROGRAMME:

The GA adopted the appeal of Council to employers to offer some financial assistance to students under their employment to ameliorate the financial burden of undertaking the Fellowship programme on them.

DECISION 99.12. ADVERT SOURCING FOR WEST AFRICAN JOURNAL OF PHARMACY:

The GA noted as reported to it by Council, the effect being made by the Editor-in-Chief, Professor (Mrs) C I Igwilo, to make the Journal self-financing. The GA also noted with appreciation, all the advert patronage given to the Journal by some pharmaceutical companies in Nigeria. The GA endorsed Council's request to Country Representatives to appoint Advert Sourcing Agents in their various countries to solicit for adverts for the Journal to enhance its sub-regional status and boost its revenue generation.

The GA noted as reported to it by Council, the increase from 20% to 25% on the commission payable to the Advert Sourcing Agent in Nigeria in recognition of her efforts.

The GA adopted Council's request to Directors of Pharmaceutical Services/ Chief Pharmacists and Registrars of Pharmacy Councils to make budgetary provisions for the Journal in their budget submissions so that upon approval, they could utilise the vote to bulk-purchase for their units/establishments and by so doing help in making the Journal self-financing.

DECISION 99.13. ASSISTANCE TO THE LIBERIA SCHOOL OF PHARMACY

Council received a letter of appeal for manpower and technical assistance to

Liberia School of Pharmacy from the Honorable Minister of Health, Liberia. Consequently, Council set-up a 4-man Committee to write-up a short-term proposal with cost, based on the request for presentation to the Executive Board, WAHC. Council also decided that the assistance requested by Liberia should (through the machinery of the WAHC) be forwarded to the Nigerian Government so as to utilise the Technical Aid Services granted to needy African Countries.

DECISION 99.14. PROPOSED PROJECT ON HIV/AIDS AND STDS WITH HOWARD UNIVERSITY SCHOOL OF CONTINUING EDUCATION

Council noted with commendation, the information given by the Foundation President, Mrs Bright-Parker that the UNDP has agreed to fund substantial components of the budget proposal submitted to it in respect of the above project. It also noted that the UNDP did not provide funding for Administrative and Co-ordinating costs of the project and appointed the following Fellows of the College to voluntarily assume those roles until funds are sourced from other donor agencies to finance them:

1. Mrs Joyce Addo-Atuah
2. Dr U S Inyang
3. Lady Eme U Ekaete
4. Dr Mariatou T Jallow

DECISION 99.15. CONSTITUTION OF FACULTY BOARDS, WAPCP

Council adopted the following Fellows recommended to it as Principal Officers of Faculty Boards, WAPCP:

a) Faculty of Hospital Pharmacy:

- | | |
|-------------------------|-----------------|
| 1. Mrs Joyce Addo-Atuah | - Chairperson |
| 2. Mr G Obiaga | - Vice Chairman |
| 3. Mr Eric Aheto | - Secretary |

b) Faculty of Community Pharmacy:

- | | |
|---------------------------|-----------------|
| 1. Sir Sam Agboifo | - Chairperson |
| 2. Mr Henry Abutiata | - Vice Chairman |
| 3. Dr Iviike Arigbe-Osula | - Secretary |

PUBLICATION OF THE GHANA PHARMACEUTICAL JOURNAL. ANNUAL REWARD FOR CONTRIBUTORS.

COUNCIL DECIDED TO REWARD ANNUALLY, PERSONS WHO CONTRIBUTE ARTICLES TO THE GHANA PHARMACEUTICAL JOURNAL

c) Faculty of Quality Assurance and Production:

- 1. Professor J.S K Ayim - Chairperson
- 2. Professor A A Olaniyi - Vice Chairman
- 3. Mr Ben Botwe - Secretary

d) Faculty of Administration and Social Pharmacy:

- 1. Dr Fred B Adenika - Chairperson
- 2. Mr Awuku Kwatia - Vice Chairman
- 3. Mr Ifeanyi Atueyi - Secretary

DECISION 99.16. CHAIRMANSHIP OF THE DRUG ADVISORY COUNCIL (DAC)

Council unanimously appointed Mr R K Omotayo, Director, Food & Drugs Services, Federal Ministry of Health, Nigeria, as the new Chairman of the Drug Advisory Council, WAPF.

DECISION 99.17. REVIEW OF ARRANGEMENTS FOR THE 12TH GENERAL ASSEMBLY & SCIENTIFIC SYMPOSIUM:

Council noted with appreciation the moral and financial support given to the Local Organising Committee by the Ministry of Health, Ghana, to ensure

the successful hosting of the conference. It also noted the comments of the Country Representative for Ghana that the Local Organising Committee had been prudent in its handling of financial matters concerning the General Assembly, and as such, there would be surplus funds to be paid into the WAPF/ Ghana National Society account.

DECISION 99.18. STATEMENT OF ACCOUNT FOR THE 11TH SCIENTIFIC CONGRESS HELD IN LAGOS, NIGERIA:

Council noted the Income and Expenditure Statement presented to it by Country Representative of Nigeria as follows:

| | |
|--------------|-----------------|
| | =N= |
| Cash Receipt | 1,609,160.00 |
| Debtors | 382,500.00 |
| | |
| Total Income | 1,991,660.00 |
| Expenditure | (1,695,326. 00) |
| | |
| Surplus | =N=296,334.00 |

Council noted the comment by the Country Representative for Nigeria that the above surplus amount would be paid into WAPF/PSN account when recovered from debtors.

DECISION 99.19. APPOINTMENT OF EXECUTIVE SECRETARY:

In noting that the incumbent Executive Secretary, Professor E N Sokomba, has resigned his contract appointment with the West African Health Community with effect from 31st March, 1999, Council unanimously recommended (Mrs) C I Igwilo to be appointed the Executive Secretary (ad interim) WAHO takes off effectively.

DECISION 99.20. CELEBRATION OF THE FEDERATION'S SILVER JUBILEE:

Council noted that by the year 2001, the Federations would be 25 years old. Consequently, Council resolved that the new Executive Members should set up the following committees and sub-committees in motion to facilitate the celebration of the Federation's Silver Jubilee with fanfare.

- 1] Fund Raising Committee
- 2] Logistic Committee
- 3] Symposium Sub-Committee
- 4] Finance Committee
- 5] International Affairs Sub-Committee
- 6] Publications Committee

DECISION 99.21. DATES AND VENUE FOR WAPF 38TH COUNCIL MEETING AND 12TH SCIENTIFIC CONGRESS:

Council decided that its 38th Meeting and the 12th Scientific Congress would be held in Monrovia, Liberia in February 2000. The Gambia was requested to be on standby should Liberia declare her inability to host the conference.

NOTICE TO ALL PHARMACISTS

The Pharmaceutical Society of Ghana wishes to announce for the information of all registered pharmacists that the 59th International Congress of the International Pharmaceutical Federation (FIP) comes off at Barcelona, Spain from 5th - 10th September 1999.

The Main Theme for the Congress is "Facing Challenges and Achieving Success". Registered pharmacists, who wish to attend may contact the Executive Secretary at the National Secretariat, Social Advance Institute building or on Telephone Nos. 228341/239583 for further information on the Congress.

Early response of members to this notice would be appreciated since arrangements are in progress to enable pharmacists in Ghana travel as a delegation.



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FIP TO FOCUS ON WORLD HEALTH ORGANISATION

The International Pharmaceutical Federation (FIP) is to seek to raise the profile of pharmacy within the World Health Organisation. That was made clear by Mr Peter Kielgast (president of the federation) when he delivered the B. V. Patel memorial address at the CPA conference. Mr Kielgast declared: "The primary focus of FIP will be to increase the visibility of pharmacists at the very highest level of policy making in the world, the World Health Organisation. By working more closely with WHO, policy makers will see for themselves the value of pharmacist contribution to the health care system. While WHO recommendations and policies are not binding on countries, they are, however, very influential. Up until now, pharmacy has had limited impact on the international stage through WHO.... The doctors, nurses and the pharmaceutical industry all have a strong presence at the headquarters in Geneva. It is time that WHO sees that pharmacists are effective and cost-efficient contributors to the health care system."

PERFECT TIMING

Mr Kielgast pointed out that the WHO was going in new directions itself and it was a perfect time for pharmacy to get involved. He went on: "With a new director general [Dr Gro Harlem Brundtland] in office, WHO is poised to take a more active role in health policy around the world. Dr Brundtland, the former Norwegian prime minister, is determined to put health at the centre of the international development agenda. She believes that, for poor countries, an investment in health will increase the gross domestic product and, for rich countries, it will decrease overall costs to society." Mr Kielgast said that Dr Brundtland intended that WHO would work more directly with countries, become more focused on outcomes, be more effective in supporting health sector development and become more innovative in creating influential partnerships, including those with non-governmental organisations. The FIP was in a good position to help WHO operate that strategy. Pharmacists had technical expertise in areas that the WHO had identified as priorities, such as smoking cessation and HIV/AIDS. FIP representation on committees and working groups would demonstrate the value of the pharmacist to WHO personnel as well as to representatives from other health care groups. WHO, Mr Kielgast added, would depend more and more on non-governmental organisations to provide technical expertise and data and to have decisions and recommendations implemented. FIP's new policy on the WHO had been decided at the FIP bureau (board) meeting in Copenhagen in January.

VALUE OF THE PHARMACIST

Mr Kielgast said that the FIP was in the process of creating a working group to begin the task of

collecting data that demonstrated the value of the pharmacist. He added: "We know that work is being done right now in many parts of the world to document the value of pharmacy services. FIP will co-ordinate these results so that countries can have access to the work that has been completed or is under way."

FIP CHANGES

Mr Kielgast said that the FIP had gone through many changes in the past few months. Much of the bureau was new. A new secretary general had started work recently. There were plans to restructure the annual congress to make it more attractive both to practicing pharmacists and to pharmaceutical scientists. On more general issues, Mr Kielgast predicted that direct advertising of prescription medicines to consumers would spread. But he said that such trends should become tools in the hands of pharmacists. Advertising would not be superior to the direct human contact and care that they as pharmacists could show their customers. Referring to the future role of the pharmacist, Mr Kielgast said: "The only way that we are going to succeed is when we can convince the payers, whether they be national health security systems or the employers and insurers, to pay us for services which have an impact on quality and cost of health care." [The B. V. Patel memorial address commemorates an eminent pharmacist from India who was a founding member of CPA.]

HISTORY OF THE ASSOCIATION OUTLINED

The history of the Commonwealth Pharmaceutical Association was set out by its former secretary, Mr Raymond Dickinson, at a conference session arranged by the academy of pharmacy history of the Australian Pharmaceutical Society. Mr Dickinson said that an environment conducive to the conception of the CPA had been created by a meeting in 1965 of Commonwealth prime ministers. "They had decided to encourage the further development of the professions nationally and internationally. As a result, the Commonwealth Foundation had been set up to achieve that objective. The foundation had decided to facilitate the establishment of Commonwealth professional associations."

ALBERT HOWELLS'S INITIATIVE

Within the pharmacy profession, Mr Dickinson said, the initiative had been taken by Albert Howells, then President of the Pharmaceutical Society of Great Britain, and the Society's then Secretary and Registrar, Desmond Lewis. An inaugural meeting had been held in London in August, 1969, to which the pharmacy profession had been invited. Twenty-eight had attended. The association had been formally established on January 1, 1970. A regionally based ad hoc committee chaired by Albert Howells met that year in Uganda to prepare for the first council meeting in London in June, 1971. The first council had comprised one delegate from each member country. While the Council was concerned mainly with policy, the association was managed by an executive committee comprising the president and a representative from each region.

FIRST CONFERENCE

The first conference had been held in Melbourne in 1972. Subsequent conferences had been held in Bombay (1977), Trinidad (1982), Nairobi (1987), Hamilton (1991), Harare (1995) and Melbourne (1999).

The presidents of the association had been Albert Howells (Britain, 1970-82), J.N. Bannerjee (India, 1982-87), Alfred Scales (Canada, 1987-91), Brian Tidswell (New Zealand, 1991-95) and Murtada Sesay (Sierra Leone, 1995-99). Albert Howells had been designated as founder president.

Among national activities of the association had been the promotion of education, drug control and government pharmaceutical services in Malta, the development of drug and poisons information services in Pakistan, the arranging of workshops on the management of drug supplies in Ghana, promotion of the profession and rational drug use in Zambia and the arranging of a course in Singapore for Bangladeshi hospital pharmacists. Mr Dickinson said that officers of the CPA and of the national society of pharmacists in Bangladesh had jointly met the prime minister of that country (Begum Khaleda Zia) in 1993 to promote the role of graduate pharmacists in the government service. A successful outcome had been facilitated by the prime minister's concern over recent child fatalities arising from a mistake in local manufacture.

The CPA was divided into six regions: the Americas, Pacific, Europe, Central Asia, Africa. Regional activities had seen the Canadian Pharmaceutical Association assisting in the development of pharmaceutical internationally, the CPA had formulated and disseminated policy guidelines on such subjects as education, the role of the pharmacist, ethics, legislation, supply of medicines in rural areas, dispensing of medicines and expiry dates.

An important activity was the Pharmaid scheme for distributing recently outdated copies of the British National Formulary to the professions in less developed countries. Among individual projects had been a distance learning programme prepared in the University of Aberdeen on the management of drug supplies. The estimated cost of preparation, production and distribution had been of the order of £100,000, which had been funded by Glaxo Holdings charitable contributions.

CLOSE LINKS

Concluding, Mr Dickinson said that the CPA had gone out of its way to establish close working links with other relevant international bodies. These included the International Pharmaceutical Federation, the International Federation of Pharmaceutical Manufacturers Associations and the International Pharmaceutical Students Federation. The CPA had observer status at Commonwealth Health Ministers' meetings. It had gained full recognition as a non-governmental organisation by the World Health Organisation and was working jointly with FIP to seek better recognition of pharmacy within WHO.

PHARMACY OWNERSHIP CONCERNS IN AUSTRALIA

Concerns that pharmacy ownership might be extended beyond pharmacists in Australia were evident during the opening session of the conference. In a speech of welcome to participants, Mr Tony Nunan (president of the Pharmaceutical Society of

Australia) indicated that the extension of ownership might be an outcome of a review to be conducted shortly by the Council of Australian Governments (COAG). The review related to competition policy and concerned not only ownership but would reach the very roots of the profession. The PSA was working with the Pharmacy Guild [which represents pharmacy owners] on a detailed submission to COAG to support the ownership of pharmacies by pharmacists. Mr Nunan said that there were very real community benefits in maintaining the current situation on ownership as the profession moved from a supply-only function to the widely accepted and practised role of pharmaceutical care.

The current arrangements had stood the test of time, he added. Mr Nunan said that a second significant event for the year would be the renegotiation by the guild of the pharmacy remuneration agreement. The PSA was keen to support the efforts of the guild on this. Mr Nunan said that the agreement needed to look well beyond the issue of remuneration. To this end, the PSA was, with the aid of a government grant, working hard to produce professional standards on pharmacy services. At the grass roots of the profession, all would have to ensure that they met the highest standards. The incentive might be: "Meet the standard or lose your right to dispense." Mr Nunan said that he would be writing soon to members of the PSA asking them to contribute to a "critical issues" fund to help finance the association's work on the two matters that he had discussed. ●

implementation of its aims and objectives as captured in its mission statement.

Its controlling body is its Council. It is comprised of a representative of each of the Ordinary Members, a representative of each of the FIP sections, a representative of both boards, members of the Bureau and FIP's Honorary Presidents. The Council meets once in a year and approves broad outlines of policy. It elects a Bureau consisting of 16 members. Five people are directly elected by the Council from those put forward by the Ordinary Members themselves and four (Chairman, Secretary and two nominees) are directly involved with the Boards, together with the President, Past President and the General Secretary. It meets four times in a year and it decides on a more detailed level of policy and on outline financial matters. FIP actively tries to make the Bureau geographically representative. Mr. Mike Rouse from Zimbabwe represents Africa on the Bureau.

The Executive Committee, which is composed of the President and the General, Scientific and Professional Secretaries, gives detailed guidance on policy and financial matters, which are implemented through the General Secretary and his staff. It meets, on average every two months.

FIP has a staff of nine working at the Headquarters in The Hague. The office is divided into the General

Secretariat, Congresses and Conferences, Membership and Finance and, finally, Publications.

The Federation is run with funds obtained from membership dues mainly. The dues are structured according to the UN's classification of its member states according to their levels of income. Higher income countries pay higher dues. Individual membership dues are also graded in the same manner. In addition to their FIP dues, individuals also pay dues to their Sections. Some Sections however exempt their developing country members from paying. Other sources of funds include donations from individual members and companies. The Dutch government also donates some money to FIP annually even though this is small. Benefits to be derived from membership of FIP are many. FIP has increasingly been playing a supporting role to the work of national associations. It has directly briefed health ministers and senior staff of health ministries, served as information source and provided national associations resource persons. Through its conferences, it has brought individual pharmacists together so they can exchange ideas and make friends. FIP also provides funds to individual members, particularly those in developing countries, for use to conduct research in areas that will benefit their countries.

WORKINGS OF THE INTERNATIONAL PHARMACEUTICAL FEDERATION (FIP)

A paper presented by Mr. T.C. Corquaye at the 1998 AGM of the Pharmaceutical Society of Ghana held at the University of Cape Coast.

The Federation Internationale

Pharmaceutique or FIP, as it is popularly known, was founded in The Hague, The Netherlands in 1912 by European Pharmacists with assistance from the Dutch Government.

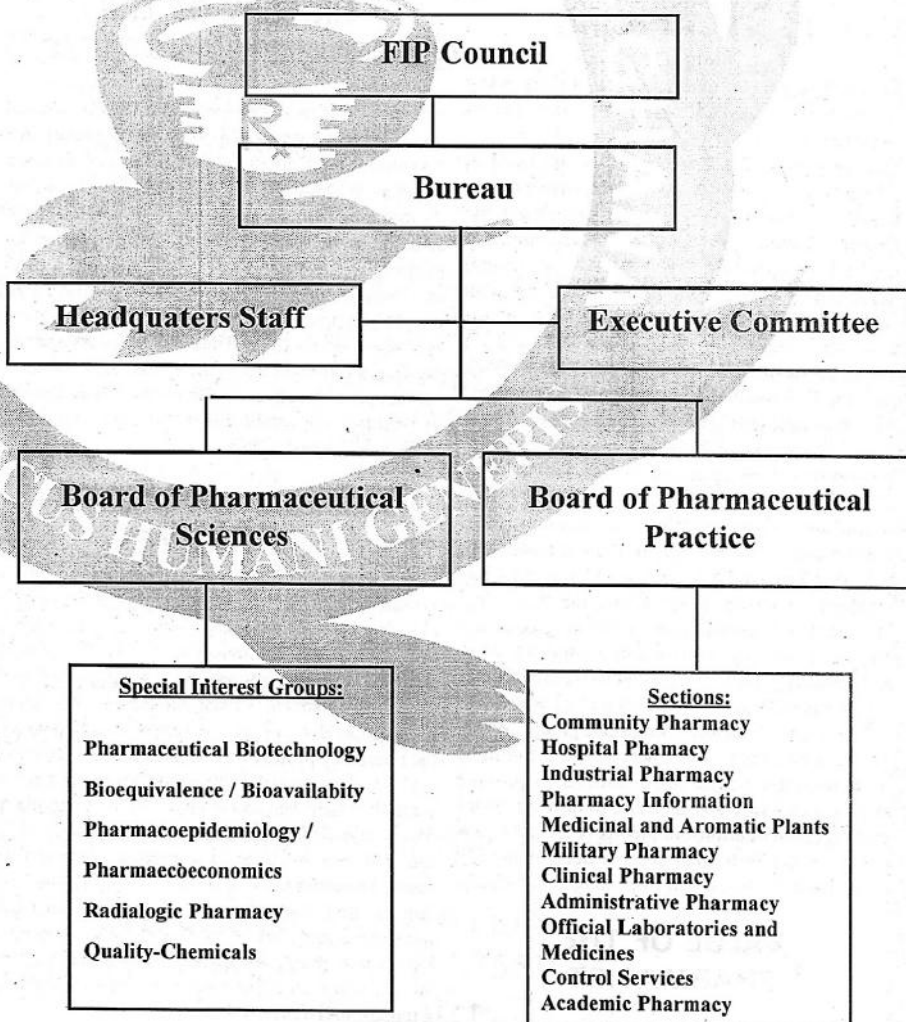
It was founded to bring together pharmacists from all over the world so that they could learn from each other and thus advance the pharmacy profession. Its mission, as defined in the FIP Statutes, is therefore to "represent and serve pharmacy and pharmaceutical sciences world-wide".

With regards to membership, FIP is made up of the following:

- Ordinary members – these are the national organisations representing pharmacists and pharmaceutical scientists, e.g. PSGH. It currently has over 80 such organizations which, in turn, represent over 250,000 pharmacists and pharmaceutical scientists around the world. Ordinary members come from 59 countries some of which are developed whilst others are still developing. This makes FIP the largest and most representative international organization in its field.
- Individual members – FIP has about 4,500 individual members from around 90 countries.
- Associate members - these are regional organisations representing pharmacists and pharmaceutical scientists e.g. WAPF.
- Collective members these are university and schools of pharmacy.
- Supporting members – this is made up of industrial companies.

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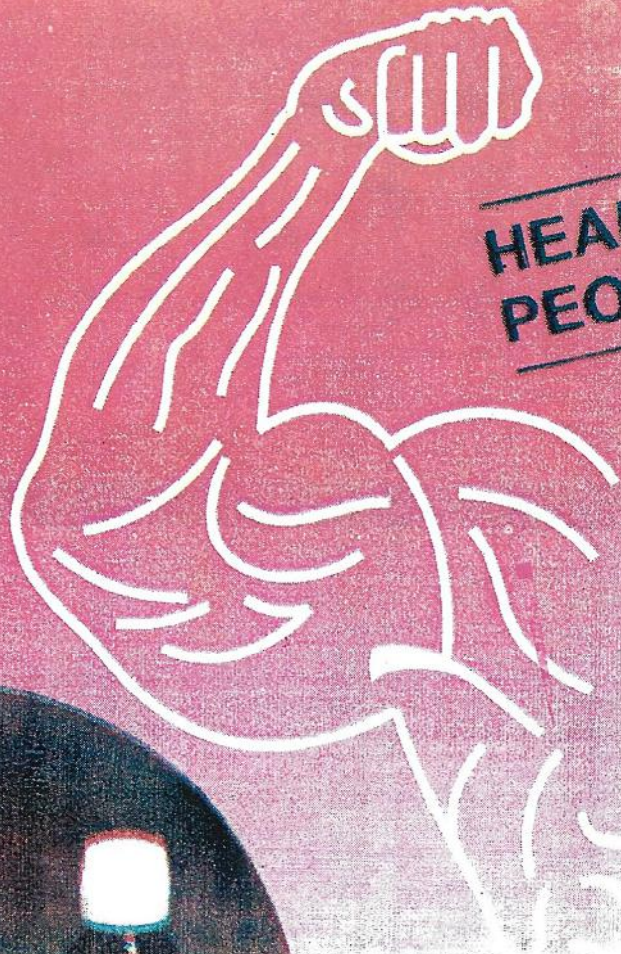
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FIP '98 - A FIRST TIMER'S IMPRESSIONS

By Ms. Marigold Korri

The 58th Congress of the International Pharmaceutical Federation or Federation Internationale Pharmaceutique (FIP) was held in the Hague, the Netherlands from 28th August to 4th September, 1999 under the theme "Building Bridges For The Benefit of The Patient". It was attended by some 2000 participants from about 80 countries, 14 of whom were from Ghana.

Sunday afternoon found me at the ultra-modern Netherlands Congress Centre, the venue for the Congress. It was to attend the first timers reception which was being organised for participants who were attending an FIP Congress for the first time. It gave us an opportunity to meet the FIP President, Mr. Dieterz Steinbach and other members of Council, as well as to fantasise with fellow first timers. It was a pleasant way to exchange one's self after a long journey.

Monday morning was devoted to the opening ceremony which consisted of the usual speeches including a warm welcome Address by the President, musical interludes, traditional dancing and finally, the presentation of awards. The most striking thing about the opening ceremony, to me, was the absence of a "High Table".

The stage was left vacant and VIP's occupied the front rows of the seats on the main floor. This enabled them to get to the stage quickly and perform whatever duties they were required to. Leaving the stage free meant that the musicians and dancers could also go and do their bit without much fuss.

In Ghana, where punctuality is apparently not considered a virtue, such an arrangement would allow organisers of functions to start while they wait for VIPs who may not arrive on time. This would save time and prevent ill-feeling among people who are on time but may have to wait, sometimes for long periods, for just one or two "special guests" to arrive.

"Pharmacy In The Netherlands" took up the whole afternoon. Participants had an enjoyable time while they learnt about pharmacy practice in the host country.

The remaining four days were packed with poster sessions, symposia, workshops and short oral communications on various topics ranging from "Preparation of Cell and Gene Transfer Products, A Role For the Pharmacist" to "Counterfeit Drug". Some of these activities were organised by Council and others by the ten sections.

Things were well organised but some activities were held concurrently and it was sometimes difficult to choose which one to attend. One consolation was that handouts on the topics were available at the pressroom.

The pharmaceutical companies and other exhibitors were there and gave out such useful souvenirs as cameras and umbrellas.

On the whole, I found the gap between the practices in developed and developing countries so wide that I began to see the wisdom in the slogan "Think globally, act locally".

Participants from developing countries in Africa had a meeting with Mrs. Agathe Wehzh of FIP on problems which are peculiar to developing countries and how to deal with them. It was decided that the issue of counterfeit drugs required an immediate attention. The President of the Nigerian Pharmaceutical Society, lady Eme Ekaette, was tasked to co-ordinate efforts at the National Association Level.

Another issue that came up was the management of our National Associations. Considering the load of work at the Secretariat and the fact that Standing Executive Committee members work on part-time basis, it was suggested that we should go the FIP way and employ Executive Secretaries if our National Associations are to move forward.

Long before FIP '98, the Standing Executive Committee of the Pharmaceutical Society of Ghana had discussed the issue and it is gratifying that, we now have an Executive Secretary. Welcome, Mr. Executive Secretary, I wish you all the best.

The social programme was also packed. The Major of Den Haag (as the locals call it) gave us a welcome reception at the Town Hall. Each section had a dinner or luncheon which was optional.

The women in pharmacy (LAPAG's equivalent) also had a luncheon. All these activities provided both social and professional contact. There were visits to places of interest in the city and its environs and nationally, participants made time to do some shopping. By the end of the week, I was quite familiar with a particular shopping mall in the city centre. It was easy to find one's way around as "Den Haages" were quite friendly and many of them spoke English.

An attempt by Mrs. Elizabeth Bruch and myself to visit the FIP Headquarters proved futile. The place was supposed to be a walking distance from the Congress Centre but after walking several blocks in different directions, we gave up because nobody we met in the area knew where it was. We later learnt that the FIP had just moved to that area.

To my mind, the only fly in the sweet-smelling ointment of my trip was the rather mundane issue of meals. Here in Ghana, the Conference fees of the Pharmaceutical Society of Ghana include lunch and snacks for each day of the Conference. It was therefore not amusing in the least to learn that participants had to make their own arrangements for lunch. In fact, one had to make out-of-pocket for everything including even drinking water. To think that during our Conferences members, especially the ladies complain there is too much to eat and drink.

The Congress was rounded off on Friday evening

with a closing dinner, of which the high point was the introduction of the new Council. The President for the next four years is Mr. Peter J. Kielgast, whose vision is for FIP to support the management of National Associations in building excellence into their leadership role.

On this occasion too, there was no high table but tables were booked in advance. Part of the stage was occupied by the band and the rest was left free so that speech makers, award winners and dancers could use it as and when necessary.

Considering the type of music the band provided, I think that participants will enjoy the last part of this Congress more if they had at least a basic knowledge of balloon dancing. I had such a lovely time that I requested to sing the song "Rien De Rien" by the French singer Edith Piaf, and dedicated it to my colleagues from Ghana and those at my table.

After five hectic days of serious deliberations, the closing dinner was indeed an appropriate way to unwind.

In conclusion, FIP '98 brought together pharmacy practitioners and Pharmaceutical Scientists from all over the world to share experience and best practices. The lesson learnt was that the public interest would be best served if pharmacists built bridges within the profession and with other groups. That is, we need to co-operate and collaborate with fellow pharmacists in our National Associations, with stakeholders within and outside the health sector, and with colleagues in other countries.

It also came to the fore that the rapidly changing world presents a lot of challenges and we must play a proactive role if the profession of pharmacy is to move forward in the next century.

It is not surprising then, that "Facing Challenges and Achieving Success" has been chosen as the theme for the 1999 Congress, which will be held from 5th - 10th September in Barcelona, Spain. It would indeed make professional sense to be in Barcelona at that time. See you there.

ACKNOWLEDGEMENT

This piece would not be complete without the mention of the organisations and individuals who sponsored my trip. I take this opportunity to thank them once again. They are:

1. Ghana Airways
2. Manet Housing Limited
3. Apostle Kankam - Kanbros Limited
4. Mr. Ben F. Ansah - Bendoz Pharmacy
5. Mr. Ted Bernasko - Benswett Co. Limited
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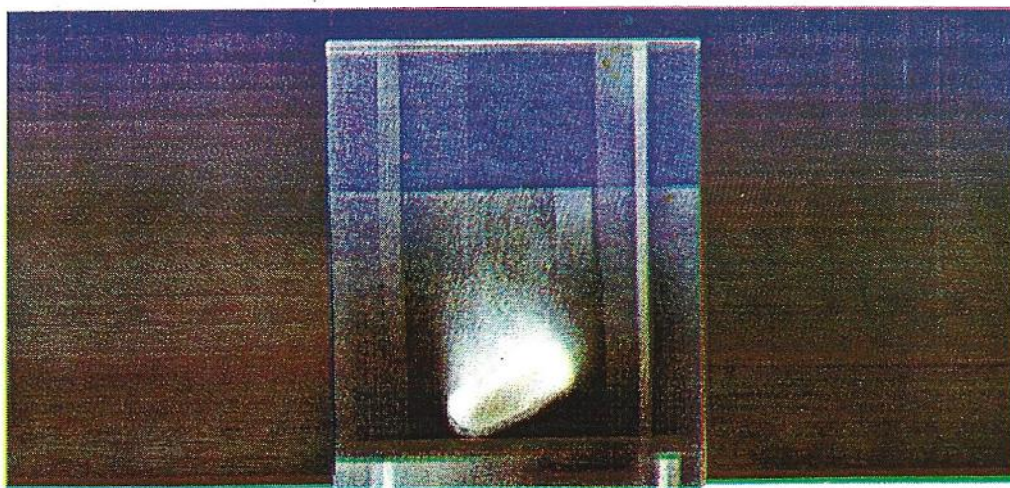
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COMMONWEALTH PHARMACEUTICAL ASSOCIATION

The seventh Commonwealth Pharmaceutical Association conference was held in Melbourne, Australia, from March 11 to 15. It was combined with the fifth Pharmacy Australia Congress organised by the Pharmaceutical Society of Australia.

CPA to establish "scholarship" fund

The Commonwealth Pharmaceutical Association is to establish a scholarship fund targeted at helping "learning in a developing country". Mrs Renate Howells has donated £1,000 to the fund in memory of her late husband, Albert Howells, founder president of the Association. The CPA hopes that others will now add to the fund. The establishment of the fund was announced by Mr Murtada Sesay (president of CPA) during the opening session of the conference. Mr Sesay announced his intention of making a donation to the fund himself.

CPA "SUPPORTERS"

A Further initiative announced by Mr Sesay was the establishment of a category of association with the CPA called "supporter". Mr Sesay said. "It is hoped that through this relationship, individuals or bodies corporate who believe in the aims of the (CPA) will be encouraged to donate to help us in our work."

Mr Sesay noted that it was the second time that a CPA conference had been held in Melbourne, the first one having been in 1972. He was sad, he said, to have to report that the association's founder president had passed away recently. Although unwell for many years and physically unable to participate in CPA affairs, Albert Howell's experience had always been at the disposal of the organisation.

Reviewing CPA activity, Mr Sesay said that the strategy of the executive committee had been to build on past gains. It had supported and retained good projects initiated by its predecessors. Giving as an example a project to promote continuing education for pharmacists in the management of drug supplies in Ghana, Mr Sesay said that when he had visited that country recently it had been clear that this initiative had had an impact. Mr Sesay noted that the CPA had participated in a World Health Organisation consultation on draft models for national drug registration and registration of pharmacists and pharmacies. It now awaited the publication of the report and its subsequent use in appropriate countries.

Referring to the association's distance learning project on management of drug supplies, Mr Sesay said that it had now been completed by over 200 candidates. The WHO was now considering adapting the course for use in newly independent states of the former Soviet Union.

Mr. Sesay also said that the CPA's Pharmaid scheme of distributing reference books continued to be well received. The biennial executive meeting in Zambia had been an outstanding success, as judged by improvements in the pharmaceutical sector of the country. In collaboration with the International Pharmaceutical Federation, the CPA had supported international workshops in good manufacturing practice in Ghana and Nigeria.

In February, six pharmacy lecturers from Bangladesh had participated in a clinical pharmacy workshop held in Singapore's General Hospital. The objective had been to equip participants with the essential knowledge required to introduce clinical pharmacy in Bangladesh.

REGIONAL VISITS

As president of CPA, he had visited four of the six regional groupings of CPA, including the CPA headquarters in Lambeth. During each visit he had been involved in sometimes critical advocacy with the authorities. In almost all cases, his conclusion had been that pharmacists were too casually involved in the management of their profession. This would have to change if the challenges facing the profession were to be met. The challenges were too great to be dealt with on a voluntary, ad hoc, "doing the profession a favour" basis. Mr Sesay said that he had visited the World Bank in 1997 and discussed the possibility of the bank and the CPA working together to release the bank's

mission in the pharmaceutical sector. He hoped his successor would pursue this initiative. Mr Sesay said that the contribution of the Royal Pharmaceutical Society to CPA goals could not be over emphasized. He commended the CPA secretary, Philip Green, and his staff for the remarkable job that they did. Mr Sesay announced that the current president of the Royal Pharmaceutical Society (Mr Hemant Patel) had mobilised a donation of £7,500 to enable the CPA to distribute journals to needy countries. The CPA was very grateful for this, as it was also for the promise of a bequest from an individual pharmacist. Mr Sesay has now taken up a post with the WHO's essential drugs and medicines department in Geneva. Pharmacy should be concerned, he said, that about a third of the world's population still lacked access to essential drugs. It should also be concerned that about half a billion persons went down with malaria every year, two million of whom would die, and that one million people would die this year from tuberculosis, drug-related problems, for which pharmacists should accept responsibility. He would seek to raise pharmacy's concern for such public health issues. Noting that it was the 50th anniversary of the founding of the Commonwealth, Mr Sesay urged all present to rededicate themselves to the ideals of "this unique family that brings together over 40 per cent of the world's population".

THE FUTURE LIES IN TEAMWORK

Pharmacy's future lies in greater team working with the medical profession, with this key relationship enhanced by the use of new technology. This was a strong message delivered to the conference by the Australian minister for health and aged care, Dr Michael Wooldridge.

Dr Wooldridge commended work that had been undertaken in Melbourne, where the division of general practice had worked with local pharmacies exchanging medication information and jointly ensuring improved health outcomes by systematic analysis proved health outcomes by pharmacists could be great systematic analysis of the medicines being taken by high-risk patients. Pharmacists, he added, had shown that they could be great team players in health. They had to resist the temptation of remaining isolated. There was great scope for working with their medical colleagues and taking on expanded roles in managing disease, especially for common illnesses such as diabetes and asthma. But to be successful in this, pharmacists would have to make full use of modern information technology. They had been the first of the health professions to become computerised, but a lot of the support technology was ageing and was incompatible with current decision support materials and state-of-the-art functionality. Pharmacists had to invest now to ensure their future viability. Dr Wooldridge did, however, acknowledge that some pharmacists were already investing in systems for patient support, medication management and pharmaceutical care; all of which minimised inappropriate use of medicines. In declaring the conference officially open, Dr Wooldridge noted that innovation and willingness to change were hallmarks of Commonwealth pharmacy generally. They were qualities that needed to be drawn on to ensure that over 1.7bn people in 54 countries received improving and universal health care.

Earlier in his address, Dr Wooldridge expressed positive feelings about the profession: "What pharmacy is almost uniquely able to do among a large and disparate group that I deal with is not to come to me with problems, but to come to me with solutions." He commended such an approach when interacting with government.

Referring to the key issues of pharmacy ownership and the negotiations on the pharmaceutical service agreement, Dr Wooldridge apologised for them coming forward at the same time, but he said that he had no doubt that, together, they would arrive at a satisfactory outcome.

Dr Wooldridge said that one great constant in the history of pharmacy in Australia was the extraordinary high regard in which pharmacy was held in the community. This was recognised by the federal government. ●

PREFACE

"The STD Manager" is a bulletin on STDs / AIDS incorporated into the quarterly publications of the Pharmaceutical Society of Ghana (PSGH) - The Ghana Pharmaceutical Journal.

This is a micro-project sponsored in part by the West Africa Project to Combat AIDS (WAPTCA).

The WAPTCA collaborates with the PSGH in the training of pharmacists on STD Management. Thirty training sessions have so far been held in the Greater Accra region as at March, 1999 for 473 pharmacists. Two sessions have since been held in the Ashanti region for 40 pharmacists. The programme is still on-going in these two regions. Similar training sessions have been scheduled to begin soon in the Eastern and Volta regions. Trainers for the programme include Mrs. Joyce Addo-Atuah, Mrs Esther Osei and Mr Phillip Anum, all of the PSGH. This joint publication therefore seeks to ensure some level of continuous awareness about the best practices in STD case management among the allied health service providers. It is envisaged that social partnership projects as this could foster enhanced commitment on the part of stakeholders in the healthcare delivery system.

S. N. Tenkorang
Executive Secretary, PSGH
(Project Co-ordinator)

EVALUATION OF THE QUALITY OF TREATMENT OF URETHRAL DISCHARGE AND GENITAL ULCERS OFFERED BY COMMUNITY PHARMACISTS IN ACCRA AND TEMA IN 1998

ACRONYMS AND ABBREVIATIONS

AIDS: Acquired Immune Deficiency Syndrome

CRC-CUSE: Centre de Recherche Clinique du Centre Universitaire de Sante de l'Estrie, Sherbrooke

HIV: Human Immunodeficiency Virus

HRU: Health Research Unit

MOH: Ministry of Health

NACP: National AIDS/STD Control Programme

STD: Sexually Transmitted Diseases

WAPTCA: West Africa Project to Combat AIDS and STDs

1.0 INTRODUCTION

Pharmacists play a major role in the management of sexually transmitted diseases (STDs) in many African cities, including Accra. In 1996, the Health Research Unit (HRU) of the Ministry of Health (MOH) estimated that pharmacists in Accra treat each year between 50 and 90,000 cases of STDs, being by far the most important provider of STD care in the city (HRU). This confirmed figures obtained in another study made in 1994 (Stanton). As a comparison, approximately 2,000 cases of STD were reported by the Accra governmental clinics and polyclinics during the same year. The HRU recommended that pharmacists should be trained in the syndromic management of STD and the WAPTCA project initiated training sessions for pharmacists in April 1997, with the support of the Pharmaceutical Society of Ghana. At this point in time, we thought that it would be appropriate to evaluate the impact of this programme on the quality of care provided to patients seen by Accra pharmacists, using field workers pretending to have STDs syndromes and seeking care in pharmacies.

2.0 METHODS

A first survey using pseudo-patients had been carried out by the project in April 1997, before the training sessions began. Two young men had been sent out at different times of the day to 251 pharmacies of Accra and Tema pretending to be suffering from either a urethral discharge or a genital ulcer. The list of pharmacies to be visited had been provided by the HRU and was thought to be comprehensive. Three of the pharmacies turned out to be closed. The pseudo-patients went discreetly to each pharmacy's counter, pretended to have urethral discharge or genital ulcer, and then asked what treatment would be provided and at what price. They then pretended not to have enough money and asked for a second, cheaper treatment. Finally, they left the pharmacy, pretending to fetch the money. They noted the following variables: name and address of the pharmacy, STDs syndrome, first choice of treatment and its cost, second choice of treatment and its cost.

In August 1998, the same 248 pharmacies were revisited using the same methodology, but this time in each pharmacy 6 male pseudo-patients were sent independently instead of only two, to generate more precise estimates. Three of them pretended to have a urethral discharge, and the three others a genital ulcer.

The same data were obtained as in 1997. We also noted in the database the number of pharmacists, working in each particular pharmacy, who had attended one of our training sessions. This number varied from 0 to 3 and for the analysis, pharmacies were divided into two groups, those where no pharmacist has yet been trained and those where at least one pharmacist has been trained.

It should be noted that the pseudo-patients were seen by staff working at the counter, and not necessarily by the pharmacists themselves. Thus this survey evaluated not only the extent to which pharmacists have assimilated the information provided to them during the training sessions, but also the effort they made transferring this information to their employees, who are not pharmacists themselves.

In 1997, each pharmacy corresponded to one observation per syndrome, while in 1998 there were 3 observations per syndrome per pharmacy. The following tables display the result according to the number of independent observation rather than the number of pharmacies.

3.0 RESULTS

3.1 Urethral discharge

Table 1 shows the results of the 1997 and 1998 surveys for the general attitude towards the pseudo-patients complaining of urethral discharge. Overall, it was possible to obtain a specific drug "recommendation" from 58% of the pharmacies in 1997, from 59% of the "trained pharmacies" in 1998, and from 51% of the "untrained pharmacies" in 1998. It is this category of respondents that will be further analysed. Among those trained and seen in 1998, only 12% told the patient that he should see a doctor, compared to 28% for the "untrained pharmacies", this difference being statically significant ($p < 0.0001$).

TABLE 1. 1997 AND 1998 SURVEYS: URETHRAL DISCHARGE

| | 1997 All pharmacies | 1998 "untrained pharmacies" | 1998 "trained pharmacies" |
|------------------------------|------------------------|-----------------------------------|---------------------------------|
| See doctor | 34(14%) | 109(28%) | 39(12%) |
| See pharmacist | 40(16%) | 31(8%) | 23(7%) |
| Come with money | 25(10%) | 43(11%) | 67(20%) |
| We'll tell you the Treatment | | | |
| Unspecified | 1(0.4%) | 8(2%) | 8(2%) |
| Drug specified | 145(58%) | 196(51%) | 198(59%) |
| Refusal | 13(1%) | 2(0.5%) | 1(0.3%) |
| Total | 248 | 389 | 336 |

Table 2 shows the drugs of first choice proposed to pseudo-patients complaining of urethral discharge. First it should be noted that, compared to 1997, there has been an increase in the proportion of patients being offered ciprofloxacin. This was seen to some extent in the "untrained pharmacies" as well, but to a much larger extent in the "trained pharmacies", where 39% of pseudo-patients were offered ciprofloxacin. The increase in the "untrained

pharmacies" is of some interest: it could be due to transmission of information between pharmacists outside our training sessions, to the seminar sponsored by the project during the last Annual Congress of the Pharmaceutical Society, or to other modes of self-training, such as publications or information provided by drug representatives. To some extent this preponderance of ciprofloxacin was at the expense of norfloxacin, another quinolone, also active against the gonococcus but more expensive. Overall, 64% of "trained pharmacies" prosed a drug effective against the gonococcus, compared to 40% in "untrained pharmacies" seen in 1998 (p=0.0001) and 31% in all pharmacies seen in 1997 before the training sessions started. In parallel, there was a decrease in the proportion of patients proposed spectinomycin from 43% in 1997, to 30% in the 1998 untrained group and 24% in the 1998-trained group. Data obtained a few years ago by Ghanaian researchers suggested that approximately 30% of strains of *Neisseria gonorrhoeae* were resistant to spectinomycin, which is also much more expensive than ciprofloxacin. Spectinomycin is no longer recommended in the national STDs treatment guidelines (NACP). Generic azithromycin, a drug with dual activity against *N. gonorrhoeae* and *C. trachomatis*, has now appeared on the Ghanaian market.

The other significant improvement is that while no pseudo-patient in 1997 was recommended doxycycline or tetracycline to be given simultaneously with drug effective against the gonococcus (to cover possible chlamydial infection or co-infection) and only 6% of those seen by the 1998 untrained group, 20% of the pseudo-patients seen by the 1998 trained group were advised to add this second drug (p=0.0001 comparing the two 1998 groups). Although this is a significant progress, much remains to be done in that regard. It is also possible that the methodology used underestimated the frequency of such a simultaneous treatment, as the desk employees might be tempted to give a quick, one-drug, response to somebody who is not clearly going to buy drugs immediately. In a future survey, it might be interesting to get the pseudo-patients to actually buy the drugs, but this would obviously increase several fold the cost of the survey.

Table 2. 1997 and 1998: First choice for urethral discharge

| | 1997 All pharmacies (n=145) | 1998 "untrained pharmacies" (n=196) | 1998 "trained pharmacies" (n=198) |
|---|-----------------------------------|--|--|
| Effective against N. Gonorrhoeae | | | |
| Ciprofloxacin | 7(5%) | 42(21%) | 77(39%) |
| Norfloxacin | 36(25%) | 22(11%) | 27(14%) |
| Pefloxacin | 0 | 2(1%) | 6(3%) |
| Ceftriaxone | 2 | 3 | 3 |
| Cefuroxime | 0 | 4 | 4 |
| Azithromycin | 0 | 5 | 9 |
| Total | 45(31%) | 78(40%) | 126(64%) |
| Doubtful efficacy Spectinomycin | 62(43%) | 58(30%) | 47(24%) |
| Ineffective against N. Gonorrhoeae | | | |
| Amoxicillin/ampicillin | 7 | 11 | 5 |
| Cotrimoxazole | 10 | 9 | 5 |
| Doxy/Tetracyclin | 5 | 18 | 8 |
| Metronidazole aloe | 0 | 1 | 1 |
| Rifampicin | 10 | 12 | 3 |
| Gentamicin | 1 | 0 | 1 |
| Cephalexin | 1 | 0 | 0 |
| Non-antimicrobial drug | 4 | 9 | 2 |
| Total | 38(26%) | 60(31%) | 25(13%) |
| Doxycycline/Tetracycline added to drug effective against GC. | 0(0%) | 12(6%) | 39(20%) |

As shown in Table 3, the results for second choice of treatment, when the pseudo-patients pretended that they did not have enough money and asked for a second, in principle, cheaper option, the numbers of pharmacies where an answer was provided to this question were limited: 75 in 1997, 53 in the "untrained group" of 1998, and 66 in the "trained group" of 1998. In 1997, spectinomycin was little recommended as a second choice because it was a frequent first choice recommendation. It seems to have now been displaced to a second-line option, after the quinolones. The 1998 trained group did better than the 1998 untrained group, and much better than the pharmacies surveyed in 1997 when looking at the proportion of drugs completely ineffective that were suggested.

Table 3. 1997 and 1998: Second choice for urethral discharge

| | 1997 All pharmacies (n=75) | 1998 "untrained pharmacies" (n=53) | 1998 "trained pharmacies" (n=66) |
|---|----------------------------------|---|---|
| Effective against N. Gonorrhoeae | | | |
| Ciprofloxacin | 1 | 4 | 8 |
| Norfloxacin | 30 | 3 | 6 |
| Pefloxacin | 1 | 0 | 1 |
| Ceftriaxone | 0 | 1 | 8 |
| Azithromycin | 0 | 1 | 0 |
| Total | 32(43%) | 9(17%) | 23(35%) |
| Doubtful efficacy Spectinomycin | 8(11%) | 26(49%) | 29(44%) |
| Ineffective against N. Gonorrhoeae | | | |
| Amoxicillin / ampicillin | 7 | 5 | 0 |
| Cotrimoxazole | 6 | 3 | 1 |
| Doxy/ Tetracycline | 12 | 7 | 6 |
| Rifampicin | 3 | 2 | 5 |
| Cefuroxime | 1 | 0 | 0 |
| Non-antimicrobial drug | 6 | 1 | 2 |
| Total | 35(47%) | 18(34%) | 14(21%) |
| Doxycycline/Tetracycline Added to drug effective Against GC. | 0 | 1(2%) | 3(5%) |

3.2 Genital Ulcers

There was little change for the general attitude toward genital ulcers. The pharmacies surveyed in 1998 were more likely than those seen in 1997 to tell the pseudo-patients to see the doctor (p=0.002) and less likely to tell them to see the pharmacist (p=0.0001), but there was no difference in that regard between the trained and the untrained group.

Table 4. 1997 and 1998 surveys: genital ulcers

| | 1997 All pharmacies | 1998 "untrained pharmacies" | 1998 "trained pharmacies" |
|--|------------------------|-----------------------------------|---------------------------------|
| See doctor | 49(20%) | 124(28%) | 93(27%) |
| See pharmacist | 44(18%) | 26(7%) | 21(6%) |
| Come with money, We'll tell you the Treatment | 16(6%) | 28(7%) | 25(7%) |
| Unspecified drug | 1(0.4%) | 5(1%) | 13(5%) |
| Drug specified | 129(52%) | 184(51%) | 190(59%) |
| Refusal/see ulcer | 9(4%) | 7(2%) | 4(1%) |
| Total | 248 | 377 | 346 |

For the first-choice treatment, there was no difference between the 3 groups for the proportion offered a treatment effective against *Haemophilus ducreyi*. Quinolones remained the most frequently proposed class of antibiotics with activity against the agent of chancroid, but there has been a switch from norfloxacin to ciprofloxacin and, in the trained group, a small increase in the number of pharmacies where erythromycin was recommended. Generic azithromycin has appeared in Accra but remains little used so far. In the trained group, there was a marginal and not significant (p=0.13) increase in the proportion of pharmacies where a treatment effective against syphilis was offered compared to the untrained group. A variety of ineffective treatments were offered in all three categories, mostly for local care of the ulcers.

Table 5. 1997 and 1998: survey: genital ulcers

| | 1997 All pharmacies (n=126) | 1998 "untrained pharmacies" (n=187) | 1998 "trained pharmacies" (n=190) |
|--|-----------------------------------|--|--|
| Drugs effective against chancroid | | | |
| Ciprofloxacin | 9(7%) | 18(10%) | 29(15%) |
| Norfloxacin | 18(14%) | 7(4%) | 5(3%) |
| Cotrimoxazole | 5 | 1 | 2 |
| Spectinomycin | 11 | 13 | 10 |
| Erythromycin | 5 | 6 | 12 |
| Ceftriaxone | 1 | 0 | 2 |
| Azithromycin | 0 | 6 | 2 |
| Amoxicillin/clavulanic | 0 | 0 | 1 |
| Total | 49(38%) | 51(27%) | 63(33%) |
| Drugs effective Against Syphilis | | | |
| Procaine penicillin | 4 | 3 | 2 |
| Benzathine penicillin | 0 | 0 | 1 |
| Doxycycline/tetracycline | 11 | 20 | 27 |
| Erythromycin | 5 | 6 | 12 |
| Total | 20(15%) | 29(16%) | 42(22%) |
| Drugs ineffective against both chancroid and syphilis | | | |
| Amoxicillin/ampicillin | 5 | 27 | 16 |
| Rifampicin | 6 | 8 | 3 |
| Oral penicillins | 1 | 3 | 0 |
| Topical penicillins | 4 | 12 | 8 |
| Cefuroxime/cephalexine | 1 | 2 | 0 |
| Cloxacillin/ampiclox | 2 | 3 | 2 |
| Gentamicin | 2 | 1 | 0 |
| Ketoconazole | 1 | 3 | 1 |
| Metronidazole | 1 | 2 | 2 |
| Chloramphenicol | 0 | 0 | 2 |
| Acyclovir | 5 | 1 | 5 |
| Antifungal creams | 6 | 6 | 8 |
| Whitfield's ointment | 0 | 2 | 0 |
| Miscellaneous disinfectants | 31 | 29 | 34 |
| Total | 65(50%) | 113(60%) | 97(51%) |

The result concerning the second choice of treatment were similar and will not be shown in details. In the 1998 untrained group, 90 provided an answer for the second choice: 13% of the proposed drugs were effective against the agent of chancroid, 14% against syphilis, and 72% had no efficacy against either of these important causes of genital ulcers. In the 1998 trained group, out of 113 replies given, 20% of the drug proposed were effective for the treatment of chancroid, 27% for the treatment of syphilis and 56% for neither condition

3.3 Cost of treatment

The cost of various treatments are shown below. We have used the median rather than the mean values because of skewed distributions. These data should be interpreted with caution. A number of prices were given by the counter employees even though no specific drug was mentioned, and for some patient a drug was mentioned but no price given. The number of observations for second-choice treatment was usually much lower than the number of observations for the first-choice treatment. By and large, these figures indicate that training of pharmacists has not resulted in a decrease in the price of STDs treatment offered to patients consulting them. There seems to have been a modest increase in the median cost of the treatment of an episode of urethritis between 1997 and 1998, even after adjusting for variations in the Cedi exchange rate (1,885 Cedis to the dollar in April 97, 2,320 in August 1998).

Table 6. Median costs of treatments

| | 1997 All pharmacies | 1998 "untrained pharmacies" | 1998 "trained pharmacies" |
|--|------------------------|-----------------------------------|---------------------------------|
| Urethritis, median cost Of first-choice treatment | | | |
| Cedis | 8500 | 12500 | 13400 |
| US Dollar | \$4.51 | \$5.38 | \$5.77 |
| Urethritis, media cost of Second-choice treatment | | | |
| Cedis | 4100 | 12500 | 16300 |
| US Dollar | \$2.18 | \$5.38 | \$7.03 |

Genital ulcer, Median cost

| of first-choice treatment | 3000 | 3000 | 4400 |
|---------------------------|--------|--------|--------|
| Cedis | | | |
| US Dollar | \$1.59 | \$1.29 | \$1.90 |

4.0 DISCUSSION

The training programme for the pharmacists of Accra undoubtedly had a beneficial effect on the management of cases of urethral discharge. There was a 33% increase in the proportion of pseudo-patients offered a drug that was effective against gonorrhoea, and some pharmacists, albeit yet a small minority, started adding a second drug with activity against trachomonas. This is encouraging and suggests that this programme, once all pharmacists have been trained, will have had a significant impact on the quality of the management of urethritis in the Accra area, considering that these pharmacies are treating a large proportion of all STDs cases. Indirectly, this could have some impact on the transmission of HIV, given the co-factor effect of non-ulcerative diseases and the reduction in the shedding of HIV associated with adequate treatment of urethritis (Cohen).

This magnitude of improvement is, in our opinion, what could be expected of health care providers who are already giving adequate treatment to a substantial fraction of their patients, and who have to take into consideration commercial factors as well. The finding that the cost of treatments did not decrease was to be expected, and shows in a way that it is possible to improve the quality of treatments offered in pharmacies without reducing their profit margins, an important point for pharmacists for whom STDs represent a significant fraction of the overall turnover. Clearly, there will always be a fraction of STDs patients who can not afford the cost of treatment offered in pharmacies, and for them the governmental polyclinics can offer good-quality care at a much lower price, but after a longer waiting period and with less discretion than in pharmacies.

But these results also underline that efforts will need to be made to maintain this improvement, and also to try to make further progress, specially with the concomitant treatment of all patients complaining of urethral discharge for both gonococcal and non-gonococcal infections. WAPTCA intends to go forward in that direction, by reiterating STDs seminars in future annual meetings of the Ghana Pharmaceutical Society, and also by the development a micro-project which would attempt to produce and distribute to pharmacists, maybe three to four times a year, a short bulletin reviewing some aspects of STDs management.

The lack of improvement in the management of genital ulcers is a disappointment. Our best explanation for this discrepancy is that there is very little genital ulcer disease in Accra and that, consequently, pharmacists were not specially interested in that part of the training or did not feel that it was important enough to disseminate this information to their counter staff. Furthermore, urethral discharges are easier to approach from a syndromic point of view, as there are usually rather clear symptoms leading easily to a correct diagnosis and treatment. Complaints of genital ulcers, without the benefit of a clinical examination, are more confusing for pharmacies staff and may lead one to think of skin problem or of scabies rather than of a sexually transmitted infection. We should also mention that the drug of choice for the treatment of syphilis is benzathine penicillin, an injectable drug, more difficult than oral or topical treatments to manage in pharmacies that may lack an injection room or skilled staff.

We did not evaluate what was offered to women with vaginal discharge. Women are less likely than males to seek care in a pharmacy when having genito-urinary complaints, and it is also more difficult to evaluate this through a pseudo-patient approach. Nevertheless, this could maybe be experimented in future surveys. By and large, these findings are encouraging. We intend to complete the training of all pharmacists in Accra in the coming months. Similar training activities will be organised later in Kumasi and in some cities of the Eastern Region. Additional activities will be organised to at least maintain the improvement noted, and if possible to help pharmacists go further in the proper syndromic management of STDs. ●

WOMEN ARE MORE VULNERABLE TO HIV INFECTION

From Mavis Kitcher, Dar es Salaam Tanzania

Men infected with HIV are two times more likely to transmit the virus to their female partners than vice versa. Dr. George Lwihula of the Muhimbili University College of Health Sciences in Dar es Salaam, Tanzania who made this known explained that there is much more HIV in the semen than in vaginal mucus and since women are receptors during sexual activity they are more vulnerable to infection. Dr. Lwihula was speaking on the topic: Reproductive Health Related Disease and Safer Sex in Dar es Salaam during a three-day seminar for journalists from Ghana, Ethiopia, Zambia, Uganda, Tanzania and Botswana. He explained that the lining of a woman's vagina and rectum are more vulnerable to infection than the penis because the surface of the mucus membrane is more easily penetrated by virus. According to him there is evidence indicating that many couples do not tell their partners of their HIV infection status adding that a study in Zaire showed that 97 per cent of pregnant women who were HIV positive were unwilling to inform their partners for fear of feeling guilty, divorced, harmed or public scum.

Dr Lwihula said one common factor between Sexually Transmitted Infection (STI), and HIV/AIDS is that they are largely transmitted through sexual intercourse from one infected partner to the other who is not infected. In Africa, he said marriage and fertility are central issues of life and a married woman is therefore expected to accept to fulfil conjugal rights with her partner even when she may be suspecting that he has been involved in high risk sexual behaviours with other women. ●

Credit: "Daily Graphic" No. 147641 June 8, 1999.

STD MANAGEMENT TRAINING FOR PHARMACISTS

By JOYCE ADDO-ATUAH (MRS)

WHAT ARE SEXUALLY-TRANSMITTED DISEASES (STDs)?

STDs are a group of communicable diseases that are predominantly transferred through sexual contact. The word sexually transmitted is key or fundamental in this definition as it underscores the fact that these diseases can also be transmitted by other means, for example from mother to child (vertical transmission) as for gonorrhoea, syphilis, HIV etc, through breast milk as for HIV, and through blood and blood products as for HIV, hepatitis B, syphilis etc.

About 20 or so micro-organisms are predominantly or commonly transmitted through sexual activity, giving rise to many STD syndromes, the 4 main ones being urethral discharge, vaginal discharge, genital ulcer disease (GUD) and lower abdominal pains. These micro-organisms may be bacterial, chlamydial, viral, protozoal, fungal or parasitic in nature.

STDs are a world-wide problem, affecting an estimated 300-350 million people every year, an average of 1 million new cases each day. The most vulnerable group falls between the 15 and 44 years bracket. These diseases continue thus to make severe demands on human and economic resources throughout the world.

In Ghana, officially - reported cases are about 15,000-20,000 a year. This however is believed to represent only the tip of the iceberg as many more cases continue to escape official monitoring channels. Survey result have established that STDs constitute between 1 and 2% of all public sector consultations and 4-5% of private sector ones. It is interesting to note that a survey of women attending antenatal clinic in Accra in 1994 revealed the following incidences of STDs:

| | |
|-----------------------|------|
| Gonorrhoea | 9.2% |
| Trichomoniasis | 8.2% |
| Chlamydial infections | 3.1% |
| HIV | 1.8% |

PUBLIC HEALTH IMPORTANCE OF STD

All over the world, but especially more so in developing countries such as ours, STDs have assumed public health importance because of the factors enumerated below:

I. INCREASING INCIDENCE

Although the incidence of the bacterial STDs appears to be on the decline in many parts of the industrialised world due chiefly to the availability of effective single-dose antibiotic treatments, that in developing countries is rather climbing rapidly, and have thus been ranked among the top five diseases for which people of reproductive age seek health care services. Statistic in some parts of Africa for example, have shown that up to 20% of adults attending government clinics are seeking treatment for STDs.

Many reasons have been given for this rather high incidence of STDs in developing countries which include the following:

- * Early sexual maturation and sexual activity.
- * Youthful population - about 50% of the population are under 15 years.
- * Rapid urbanisation and easy social morbidity including migratory labour.
- * Failure to follow safer sex measures.
- * Delay in getting STDs treatment.
- * Lack of infrastructure for STDs Control.

II. LONG TERM COMPLICATIONS AND SEQUALAE

An undiagnosed or inadequately treated infection in a given individual, has both short and long term implications. In the short term, it may cause considerable morbidity; these diseases being counted among the most common causes of morbidity in the world among people in the reproductive age bracket.

In the long term, they cause blinding eye infections in infants born to infected mothers, congenital abnormalities may arise from in-utero transmission, both men and women may develop infertility problems, women may suffer chronic lower abdominal pains, spontaneous abortion, ectopic pregnancies and cervical cancer, and of course AIDS ultimately culminates in death.

III. RELATIONSHIP BETWEEN STDs AND HIV/AIDS

The public health importance of STDs the world over, has assumed unprecedented proportions with the advent of the HIV/AIDS pandemic. This is due to the causal relationship that has been established between STDs and HIV infection, in that both the

ulcerative and the non-ulcerative STDs facilitate the transmission and acquisition of HIV during sexual contact. STDs may increase the risk of HIV infection by 2 to 9 times. There is no gain saying the fact that the break in skin continuity that is present in genital ulcers, allows easy access for HIV. STDs are also associated with significant increases in white blood cell count in infected individuals, these cells unfortunately being both the target and sources of HIV. On the other hand, it has been established that in the presence of HIV/AIDS, both the natural history and treatment of STDs may be adversely affected. For example, syphilitic lesions tend to last longer and single-dose treatments for chancroid may fail to achieve the desired result.

STD CONTROL AND HIV/AIDS PREVENTION

The causal relationship between STD and HIV/AIDS underscores the current worldwide emphasis being placed on STD control which has come to be seen as a major strategy in the global fight against AIDS. The scarcity of resources especially in the most vulnerable areas of the world and the increasing incidence of STD in such population requires that STD control be implemented within the framework or context of existing primary health care (PHC) service and integrated within HIV/AIDS prevention.

THE GOALS OF STD CONTROL ARE TWO FOLD

- Prevention of transmission of infection (primary prevention) and
- Prevention of the development of complications and sequelae (Secondary Prevention)

The latter involves primarily adequate management of STD patients and their sexual contacts which is believed to be the cornerstone of STDs control.

It is precisely to provide effective and standardised STDs management protocols that the WHO has promulgated the Syndromic Approach to STDs Management, which is especially of relevance to developing countries where the care of STDs patients tends to span the whole spectrum of healthcare providers practising with little or no access to laboratory facilities.

The Syndromic Management of STDs involves the following:

- * Syndromic Diagnosis.
- * Effective Treatment of STDs Patients and their sexual contacts using laid-down protocols for treatment.
- * Patients Education and counselling
- * Follow up for evaluation of treatment.
- * Active condom promotion.

THE RATIONALE FOR TRAINING PHARMACISTS

Community pharmacies have been identified by a World Health Organisation working group on STD management as one of the important sources of care for STD patients in developing countries. In Ghana, a study commissioned by USAID in 1994 showed that community pharmacists see more STD patients than any other health care provider because they offer rapid and discrete service in the community.

In 1996, the Canadian International Development Agency (CIDA), through its seven-nation regional HIV/STD programme (West Africa-Project to Combat AIDS), commissioned the Health Research Unit (HRU) of the Ministry of Health to undertake a survey of community pharmacies in Accra and Tema to determine their STD case load, the type of treatments offered, as well as their STD drug supply systems.

This survey revealed that approximately 50,000 - 90,000 STD cases are seen by pharmacies in the study area in a year. This is thought to represent about 90% of all STD cases in Accra-Tema. It was the opinion of the researchers therefore that if the efforts at curbing the rising incidence of HIV/AIDS through the strategy of effective STD control is to have any significant impact in our society, then the significant role being played by pharmacists should no longer be overlooked, but should be properly harnessed and improved for the common good. On the other hand, the treatments being offered for STD clients in the pharmacies studied were poles away from the MOH/WHO guidelines for STD management. The drugs officially recommended for the treatment of gonorrhoea for example were not regularly recommended nor stocked by most pharmacies. To bring the much needed standardisation in STD management in all healthcare settings in Ghana including pharmacies therefore, the recommendations made by the Health Research Unit (HRU) included the following:

- * Training in STD management should cover proper use of syndromic guidelines and the Pharmacy Council should ensure standards of STD management during its routine standards checks.

- * Provision should be made in the revised pharmacy training curriculum to include the STD management strategies, which should be developed and agreed upon by the Pharmacy Council and the Society with MOH assistance.

- * In-service training workshops and follow-up seminars organised by the Pharmaceutical Society on STD management should be mandatory for all registered pharmacists and their employees.

- * Copies of the MHO's STD guidelines (Syndromic algorithms) should be present at every

pharmacy to facilitate diagnosis, treatment and referral.

- * Pharmacists should be encouraged to stock and use the appropriate STD drugs recommended by MOH.

THE TRAINING PROGRAMME AND ITS OUTCOMES SO FAR

The recommendation of the HRU empowered the West African Project to Combat AIDS to pursue its programme in Ghana, an important aspect of which is the training of healthcare providers including pharmacists in the syndromic approach to STD management.

The pharmacist's training programme as well as the development of the content of the training curriculum itself, have been a joint effort of the West African project to Combat AIDS, the Pharmaceutical society of Ghana and the Ministry of Health through the National AIDS and STD Control Programme (NACP).

The one-day pharmacist's training session which started in April, 1997 is on-going; the training programme aims at providing pharmacists with the requisite knowledge, skills and the right attitudes for the proper management of STD in the community and involves the following:

- * A pre-test to determine the pharmacists' residual knowledge and practice with respect to STD management.
- * Epidemiology (Global and National) of STD, HIV/AIDS and their causal relationship.
- * Symptoms and complications of STD.
- * Syndromic approach to STD management.
- * Contact tracing and condom promotion.
- * The specific role of the community pharmacist.
- * Case studies - small group discussions of cases which have been designed to highlight the various scenarios, patient circumstances and presentations, including specific skill needed to deal with each appropriately. An open forum which follows the small group work enables each participant to obtain the maximum benefit of each case study.

Between April 1997 to February 1998, 51 pharmacists have received this training. Preliminary evaluation obtained from those trained so far points to the usefulness, and appropriateness of the training programme which they claim has dramatically improved their confidence and skills in the proper management of STDs. All respondents were unanimous about the effectiveness of the current official STD management protocols.

Record keeping however did not appear to be the strongest point of the pharmacist respondent. However, since records on STD case management in pharmacies will now contribute to the national surveillance of STD incidence in the country, it is important that pharmacists treating STD clients keep the following records which will be collected at regular intervals from their premises:

- * the sex of the STD client.
- * The age range of the client.
- * Presenting complaints.
- * Syndromic diagnosis - i.e. Urethral discharge, genital ulcers or lower abdominal pain.
- * Drug therapy provided
- * Outcome at follow up.
- * Whether partner (s) treatment was achieved.
- * Patient Education/Counselling.
- * Condom promotion and sales.

CONCLUSION

The training of pharmacists in the syndromic management of STD in the community is bringing the much needed standardisation which is required to span the whole spectrum of healthcare providers in the country. This training should be embraced by all pharmacists as we need to seize this opportunity to assert ourselves as health professionals who are operating at the community level primarily to bring better health and life style changes through education to our peoples. It is interesting to note that the WHO and the International Pharmaceutical Federation (FIP) signed a joint declaration spelling out the role of the pharmacist in the fight against the HIV/AIDS pandemic during the FIP Congress in Vancouver last year, the full text of which has been published in this Journal for the benefit of all.

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OBESITY MANAGEMENT

Recent and significant changes in the health care environment have created, for those pharmacists who can look beyond their accepted role of filling prescriptions, an opportunity to play a vital role in the management of obese and overweight individuals.

Approximately one-third of Canadians are overweight or obese, and many prescription products to treat obesity are currently available or in development. As a result, over the next few years, the pharmacist will be presented with many customers who are being treated for obesity or its associated co-morbidities. The pharmacist with the vision to consider the health-management needs of the whole patient, and not just the pharmaceutical management of obesity is uniquely positioned to take advantage of opportunities for developing innovative programmes for overweight pharmacy customers.

CURRENT CONCEPTS

Obesity is now generally defined in terms of body mass index (BMI). According to Canadian guidelines, a BMI above 27 is associated with an increased risk of developing other health problems. Using this definition, the recent Canadian Heart Health Survey indicated that 35% of Canadian men and 27% of Canadian women are overweight, and that mean BMI increases with age.

"The bottom line with regard to the etiology of obesity is an issue of debit and credit - the obese individual takes in more calories than he or she expends in energy. The causes behind this imbalance, however, are often not related to 'willpower'; rather many obese individuals may be metabolically different than their lean counterparts. Therefore, despite their best efforts obese individuals often have difficulty losing weight. This is why treatment with weight loss medication is sometimes necessary as an adjunct to diet and exercise". (Dr. Leiter)

The etiology of obesity is complex and therefore not well understood. Although it is often assumed that people are overweight because they eat too much, studies generally have not confirmed this assumption; in fact, they indicate that, on average, obese individuals do not eat any more, and may even eat less, than their lean counterparts. Differences in energy expenditure may, however, play an important role. Even a small decrease in metabolic rate can result in a significant accumulation of body fat.

The example of an individual who consumes 1500 calories daily, but has a 2% decrease in metabolic rate, can be used to illustrate the importance of metabolic rate. A 2% decrease in metabolic rate would result in a gain of 30 calories per day which is equivalent to a weight gain of three pounds in one year or 30 pounds in 10 years.

A study by Bouchard et al.², of identical twins, demonstrated that significant differences in weight gain can be between individuals, despite the same activity levels and food intake. Some individuals readily gained weight, whereas others, despite receiving the same excessive number of calories, were relatively resistant to weight gain. The study also confirmed a genetic predisposition. If one twin readily gained weight so did the other, whereas if one twin was relatively resistant to weight gain, so was the other. Further research suggests that up to

50% of the variation in body weight from one person to the next may, in fact, be genetic³.

A recently identified hormone, leptin, plays a role in obesity. Normally, fat cells secrete leptin, and, in a neurohormonal feedback loop, circulating leptin signals the hypothalamus to decrease food intake. Paradoxically, in obese individuals, as the percentage of body fat increases, so does the serum level of leptin⁴. Because obese individuals have higher leptin levels than their lean counterparts, it is speculated that obesity might result, not from a lack of leptin, but rather from leptin resistance. Clinical trials of the effects of leptin analogues on food intake and weight loss are in progress.

RATIONALE FOR TREATMENT

Although obesity is a well-known risk factor for many conditions, the magnitude of the increased risk associated with obesity is not generally recognised. The American Nurses' Health Study⁵ followed more than 115 000 American women for eight years. The study found that even women within the healthy BMI over 24, had increased cardiovascular risk. The relationship was linear; as BMI increased, so did the risk of cardiovascular disease and coronary heart disease. In addition, the study found that even women whose weight was in the desirable range, but who gained more than 20 pounds in adulthood, had a 60% increase in the risk of cardiovascular disease. Finally, abdominal obesity, measured either by the waist to hip ratio, or by increased waist circumference alone, was associated with an increased risk of diabetes, elevated cholesterol, hypertension, coronary artery disease, and mortality. Studies have shown that individuals at greatest risk of developing diabetes were those with the highest BMI, and the highest waist to hip ratio. Manson's study⁶ highlighted the chronic diseases attributable to overweight in the United States. In women, 90% of type 2 diabetes was attributable to obesity, as was 20% of hypertension, 37% of coronary heart disease, 10% of cerebral vascular disease, 32% of cancer in non-smokers and, overall, 23% of total mortality. There can be no doubt that obesity is a disease that merits treatment.

TREATMENT SUCCESS

No treatment for obesity is universally successful and free of side effects, and therefore it is difficult to define both who should be treated and what the treatment goal should be. It may be most appropriate to confine treatment to individuals experiencing complications of obesity that can be improved by weight loss and those at high risk of developing complications, such as diabetes. The goals of treatment, however, must be individualised. Therapeutic success may be defined as weight loss, prevention of further weight gain, or amelioration of complications. Dramatic improvements in blood sugar, cholesterol, and blood pressure can often be achieved by a weight loss of only 5% to 10% of initial body weight. The success of diet programmes has not improved dramatically since the publication, in 1959, of a review of the diet literature by Stunkard and MacLaren-Hume⁷. The review found that only 25% of 100 obese patients lost 20 pounds, and only

40 pounds. Two years post-treatment only two patients had maintained weight loss. These figures may be artificially low, as successful dieters may not seek medical help and, therefore, may not be included in the statistics. Nonetheless, studies consistently show that diet therapy alone is not very successful in achieving long-term weight loss. In addition, rapid weight loss may lead to physical changes including fatigue, light-headedness, nausea, precipitation of gall stone disease, and more commonly, to psychological changes. People who are dieting may become depressed, complain of cognitive changes, and may have difficulty concentrating. They may also be at risk of developing eating disorders. Patients who succeed in the long term tend to be those who increase their physical activity and learn behaviour modification techniques. Behaviour modification therapy is most successful when applied in the term. The development of maintenance strategies, such as relapse prevention, similar to those used in conditions such as alcoholism, generally improve long-term outcome. However, these programmes are expensive and are not always readily available.

PHARMACOTHERAPY

In some patients, drug therapy can be a useful adjunct to diet and exercise. Drugs can be designed to affect several potential sites: they can reduce energy intake, reduce fat storage, or increase energy expenditure. No drugs that affect energy storage have yet been successfully developed. Beta₂-agonists are a promising class of drugs that increase energy expenditure and are currently being investigated in early clinical trials. Currently available drugs are anorectic agents, which reduce energy intake by depressing appetite and decreasing food intake. Anorectic agents can be divided into two categories: noradrenergic, amphetamine-like drugs, such as phentermine, and serotonergic agents, such as fenfluramine. Noradrenergic agents can be associated with insomnia, tremor, and other sympathomimetic side effects. Of the serotonergic agents, the only ones that had obtained indications for the treatment of obesity were fenfluramine and dexfenfluramine, the more widely used drug. Recently, however, because of an association with valvular heart disease, fenfluramine and dexfenfluramine have been voluntarily withdrawn from the market.

Promising new agents to treat obesity include sibutramine and orlistat. Sibutramine is another appetite suppressant, which inhibits both serotonin and dopamine re-uptake in the brain. Sibutramine also has thermogenic properties, acting to increase oxygen uptake; this may increase energy expenditure. Orlistat (XenicalTM) is a specific long-acting inhibitor of gastric and pancreatic lipases. It is not absorbed and has no central nervous system effects. Orlistat competitively inhibits lipases in the gut, resulting in malabsorption of approximately 30% of ingested dietary fat and, therefore, in weight loss. Clinical trials indicate that in the first year, patients lost an average 10% of initial body weight, and that 75% of patients achieved a medically meaningful weight loss greater than 5% of initial body weight. The option of adding drug therapy to a weight-loss programme should be considered in compliant patients who are significantly obese, who have a high risk of complications, and who have failed to lose

weight using more conservative strategies. Most importantly, the patient who is a candidate for drug therapy must understand that medication is just one component of a comprehensive approach to weight management.

NUTRITION AND LIFESTYLE

"Food is not only an essential source of nutrition, it's a social vehicle. Food is a vital component of how we relate to our family, friends, and co-workers. Thus the capacity to cope with reduced food intake requires special skills" (Dr. Mendelson) Unlike the habit of smoking, cessation of food is impossible: food is an essential part of healthy living. In order to succeed in quitting, a smoker must avoid situations associated with tobacco: this is simply not possible with food. Although drug therapy can be a useful addition to weight-management programmes, the success of any programme ultimately depends on patients' motivation and their ability to manage and make permanent lifestyle changes. A decrease in caloric intake, an increase in energy expenditure, and management skills should be combined in individualised treatment programmes.

NUTRITION

Reducing caloric intake is necessary for weight loss, but reducing the total amount of food may not be. Skills involved in healthy eating include food selection, meal planning, food preparation and cooking. Because food is an important social vehicle, the health care professional must recognise that access to different sources of pleasure, entertainment, and food vary dramatically depending on income. These differences must be considered when individual weight-loss programmes are being developed.

Appetite, a very important consideration, is not tightly regulated: it does not consistently turn off when enough food has been consumed. Because satisfying appetite involves both appeasing hunger and deriving physical and emotional comfort from food, a successful individualised food plan requires careful attention to a person's food preferences and lifestyle. Rather than eliminating a food item entirely, dietary fat can be reduced by substituting one food for another, such as switching from homogenised to skim milk, and from sour cream to yoghurt. A breakfast of pancakes with syrup contains six grams of fat, but bacon and eggs contains 37 grams of fat. Because every gram of fat has nine calories, twice the caloric density of carbohydrates, simple changes, such as choosing a turkey breast sandwich rather than a tuna salad sandwich, can significantly affect caloric intake without requiring dramatic and distressing changes in a person's diet. People may also need to learn healthy eating patterns. Studies have shown that people who split their day's intake into thirds (breakfast, lunch, and dinner) fall into a healthier eating pattern than those who skip meals, and these individuals are more likely to lose weight and maintain a healthier weight. Other eating patterns can also be affected by education. People who eat in the absence of hunger, for example, in response to stress, for entertainment, or out of boredom, can be taught other ways of dealing with these feelings. Also, when dining in expensive restaurants, people who feel compelled to finish the entire meal can be taught strategies to address this problem. These strategies include looking for restaurants that offer foods that are lower in fat and calories, ordering half-servings, ordering one course at a time, requesting salad with dressing on the side, and choosing clear or tomato-based soup as a starter. Patients can be taught to choose lower fat options, to understand food composition, and to manage appetite. These skills can help them cope both with restaurant eating and with managing their everyday food intake.

LIFESTYLE

An increase in energy expenditure is an important

part of a successful weight-loss programme. Although the actual caloric expenditure of most physical activities may not be very high, active people feel better, and activity may also moderate appetite. In addition, activity increases muscle mass, which burns more calories than fat tissue. As a result, body composition changes associated with physical activity contribute to energy expenditure beyond the calories actually expended in activity. Those exercise programmes that integrate activity into everyday living tend to be more successful in the long term. Everyday activities include walking wherever possible, using stairs more often, and enjoying a social life that include physical activities, such as cycling or volleyball, rather than sedentary ones, such as movies and television. Activities must also be individualised, based on personal lifestyle, goals, and enjoyment. People who enjoy physical activity maintain it, if physical activity is unrewarding, it will not be continued. People who are successful in losing weight and maintaining weight loss are more likely to have a higher level of education, to work outside the home, to have high self-esteem, and to exercise regularly. People with a lower level of education, low self-esteem, and those who do not work outside the home or exercise regularly are less likely to be successful. This latter group presents a challenge to those health care professionals who are working with them. The skills involved in healthy eating and activity can be taught; these skills can significantly contribute to lifelong health and well-being.

WEIGHT MANAGEMENT: OPPORTUNITIES FOR PHARMACISTS

"The pharmacist can offer a bridge to other health care providers, such as the dietician, and can expand his or her role as educator. The prescription is not the end. The pharmacist is one of the most accessible health care professionals and one of the most trusted health care providers" (Mr. Lender)

The pharmacist is uniquely placed to offer health-management programmes to overweight customers. Community pharmacists are the most accessible health care professionals, many customers may therefore regard pharmacists as their primary care givers. Patients can speak with pharmacists and get good advice about most medical conditions. Today's pharmacists also have the education and disease-management skills to provide significantly more services than filling prescription, and many pharmacists want to become more involved with patient care. In fact, many pharmacists are already working with patients in diabetes management programmes.

The pharmacist offers the customer a relationship of trust. Pharmacists see patients much more frequently than physicians and get to know them well. This relationship is a unique factor that provides the pharmacist with an opportunity to offer additional health services. In addition, the pharmacist is well positioned to determine unmet health care needs of pharmacy customers and to create value-added services to meet needs.

Filling prescriptions is an ideal time to talk to customers and determine their needs, which may indicate potential pharmacy services that could be developed and provided on a fee-for service basis. Although no pharmacist has all the skills required to provide customers with various services, the skills of other health care professionals, such as dieticians, diabetes educators, and exercise physiologists can be accessed to meet customer needs. Working with other health care professionals allows the pharmacist to expand the range of skills available to customers and to develop comprehensive but individualised programmes. Programmes can include nutritional counseling, computerised dietary analysis, weight management, and health-management programmes. Once customer needs have been identified, the services of other appropriate health care providers

enlisted, and programmes developed, the pharmacist is again in a unique position to promote these services to customers. For example, when an overweight customer is filling a prescription for a weight-loss drug, the pharmacist can describe and promote weight-management services. Pharmacy computers contain complete customer data-bases that pharmacists can use to target specific programmes to particular patient groups. Also, because pharmacists frequently speak to physicians, they can use these contacts to promote their weight-management and disease-management programmes. These services are especially applicable to the ageing population, because of their heavy use of health care resources. Pharmacy customers who are potential candidates for weight-management programmes tend to have established pathology, such as diabetes or hypertension. These patients may not be motivated to purchase health-management services, and therefore they may take some time to decide to participate in a programme that can help them. Once these programmes have been developed, however, they can also be offered through health clubs. The health club population, although often overweight, tends to be composed of healthy people, who are already motivated to stay healthy, to lose weight, or to look and feel better. Because these individuals are usually very enthusiastic about participating in weight-management programmes, the health club population constitutes a significant opportunity for promoting health-management services. To take advantage of business opportunities in today's health care environment, pharmacists must look beyond prescriptions, to the customers, their needs, and their problems, and determine what services could be provided. Once potential services have been identified, the pharmacist should develop a business plan to help determine what financial resources are required, what time commitment is necessary, and what health or disease areas are of the most interest.

CONCLUSION

Obesity is a disease that must be treated because it is associated with significant health risks. Appropriate treatment consists of individualised treatment plans, education and counseling, moderate restriction of caloric intake, increased physical activity, instruction, in behavioural modification to improve both eating and activity behaviours permanently, and finally, pharmacotherapy as appropriate. ●

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SELF MEDICATION AND SELF CARE

THE PHYSICIAN'S PERSPECTIVE

Simon Fradd

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The number of different drugs available by direct purchase in Britain today is quite staggering. It seems almost every day another compound is added to the pharmacist or over-the-counter lists. Are these all really necessary for patient self-medication or is it just a marketing ploy by the pharmaceutical industry? It is not many years since we only had a handful of drugs available to doctors on prescription. It is only half a century since the discovery of penicillin. Prescription only medicines now run into the thousands. We should not be surprised that there has been a similar increase in drugs available direct to the public. In fact, if anything, the increase in P and OTC compounds has lagged behind. We have become more sophisticated at managing illness. Nowadays we endeavour to cure the disease rather than only provide symptomatic relief. Of course in the commonest conditions of all, viral upper respiratory tract infections, we still have no cure. Interestingly symptomatic treatments for these are almost always called remedies. It is only proper, when safe, curative medications exist, that they should become available direct to the public. In fact the ingenuity of the drug manufacturers has placed enormous pressure on health care services throughout the world. Knowing that something can be done for you is an enormous driver of demand. The move by the medical profession, health insurers and governments to encourage self-medication results from this. There is of course a range of opinion within the medical profession. Those against increasing self-medication argue that the public cannot be sure of their diagnosis and may get symptomatic relief when the underlying disease is dangerous. The prime example is the use of H₂ antagonists and proton pump inhibitors in the management of dyspepsia. The contra view is that modern patient information leaflets carry hefty warnings about prolonged usage. Such agents have already had many millions of sales and there is no evidence of a significant increase in diseases pro-

gressing. There is similar range of opinion among the public. Every GP has been frustrated by the patient who complains of pain of several weeks duration but who has never taken a simple analgesic. Self-medication is a necessity both for the patient to have immediate access to appropriate treatment for minor illness and to relieve the pressure on clinicians. The question is how to make this as safe as possible? In the UK we have a highly skilled workforce in pharmacists who have largely been reduced to labelling packets and watching their computer screens for potential interactions. The current workforce crisis in the NHS cannot be resolved by the recruitment and retention of doctors and nurses. The demand for healthcare has exceeded our ability to provide these people in sufficient numbers. The answer lies in using the skills of a greater spectrum of the health care workforce. Prime among these are pharmacists. The latest move by the British government is to develop pharmacy prescribing. This will require increasing skills and facilities, particularly privacy for consultations. There will be an enormous spin off in the ability of pharmacists to advise on self-medication. One area these colleagues will have to put right is the sale of expensive and inappropriate drugs. Leading among these are cough medicines which in most cases are nothing more than cough suppressants. Cough is generally due to dryness of the respiratory tract resulting from breathing through the mouth. The treatment of choice is humidity best achieved by the inhalation of steam. I suppose they could sell bottled water.

THE PHARMACIST'S PERSPECTIVE

Anders Uppfeldt

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The situation for self-medication varies considerably between countries depending on, among other things, tradition, availability of physicians, cost for prescriptions and the degree to which medicines are subsidised. This report takes into consideration the author's opinion and experience, which is based from a Western European perspective. It must be noted

that the situation in other parts of the world is quite different. However, most professional actors agree that self-medication is steadily increasing. There are several factors contributing to the increase, such as

- * Consumers are better educated today.
- * Authorities are being questioned more and more
- * Consumers want to decide more for themselves.
- * There is an increased interest in health matters both among the public and in different media. For example, the availability of information is increasing on the Internet.
- * The cost for health care is increasing and governments encourage the use of self-medication to limit the costs.
- * An increasing number of prescription (Rx) drugs are being switched to over-the-counter (OTC) status.
- * An increase in very old people in the population will increase the burden on the health profession and physicians will have less time to treat patients with minor illness.
- * The drug industry sees an opportunity to expand.

IS THE INCREASE IN SELF-MEDICATION A GOOD OR BAD DEVELOPMENT?

From a patient's point of view, it is mostly good; otherwise, they would not be using it. It is readily accessible, reasonably cheap and in most cases safe. One problem is the amount of information available and the quality of that information. Some patients will misinterpret the information and thus treat themselves in a wrong way, for too long, or with the wrong product. From the pharmacist's point of view, it will increase our responsibility and the demand on proper knowledge of when to refer a customer to a physician. The education of pharmacists has to put more emphasis on communication and counselling skills. Good, professional counselling with satisfied customers will increase the attractiveness of our profession and should also motivate increased sales margins. The co-operation with the industry is important for developing customer and pharmacy-friendly packaging and labelling. The regulatory authorities must also realise that the requirements on OTC packages and labels are quite different than those

on Rx products and here the industry and pharmacists have an important task to improve the situation. The industry and the pharmacists have a common interest in a profitable turnover of OTC-products. However, there must never be any doubt that the individual patient and his/her best interest are the prime objectives for all parties involved. Some physicians are against increasing self-medication, as they fear that patients with serious diseases may go untreated for too long. A close co-operation with the medical profession and discussion about the borderlines for self-medication should be able to solve this problem. How can self-medication be developed in the future? In some countries, the pharmacies have computerised files where the patient's total supply of Rx medicines is registered. This will enable the pharmacist to identify for example risks for interactions. Such systems should also be developed or expanded to include OTC medicines, as there are potential hazards also with different combinations of Rx and OTC medicines. In most countries, systems have been developed for reporting adverse drug reactions (ADR) to Rx drugs. OTC products are generally safe but as more and more active products are switched from Rx to OTC status, the risk for ADR increases. Therefore, a corresponding system for ADR reporting systems should be developed also for OTC products.

CONCLUSION

The pharmacist has an important role to play in healthcare systems, where self-medication is on the rise. The pharmacist must ensure effective communication with physicians, work with the industry to ensure appropriate packaging standards and, above all, help the consumer by providing accurate information regarding self-medication products. Furthermore, systems within the profession, such as patient profiles and ADR reporting, need to be developed to monitor the effectiveness of self-medication policies in general.

THE CONSUMER'S PERSPECTIVE

Linda F. Golodner

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The National Consumers League is a non-profit membership organisation with headquarters in Washington D.C. Our mission is to represent and educate consumers, both in the United States and in other countries, about marketplace and workplace issues. Health care is one of our major programme areas. Here is our advice for consumers: Consumers

who self-diagnose and self-medicate with non-prescription drugs must assume important responsibilities. First, when they determine what is wrong; sometimes, they may not think about whether they get too many headaches, have a recurring bronchial condition, or take an antacid several times a week. If this is the case, they may need to talk to a doctor or pharmacist. Second, before self-medicating, consumers should ask themselves: Have I checked the label and read it carefully? Do I understand what the label says? Am I taking the correct dosage? If the label indicates I should see a physician after a certain number of days, have I done so? And what about the warnings and interactions? Am I taking a new prescription drug that may interact with the over-the-counter medication? If the patient has any questions or does not understand some of the words on the label, he or she should talk to his or her pharmacist or physician. One of the most important responsibilities for consumers is that they know their own body and how it reacts to the medicine that are taking. Are they feeling better or worse when they take the medicine? They should talk it over with their pharmacist or other health professional if the medicine is not working or if they experience side effects or reactions that do not seem normal. Self-medication is very convenient and there are more and more medications available for consumers to take control of their own health regimen. But they should always remember that health professionals are the experts, and they are there to answer the questions to help them self-diagnose and self-medicate. Consumers must feel comfortable to ask the pharmacist any type of question about self-medication. Sometimes, consumers cannot read the label because of language or literacy issues. The consumer should not hesitate to ask for assistance in interpreting self-medication labels.

THE ROLES OF THE PHARMACIST IN SELF CARE AND SELF MEDICATION ARE SUMMARISED IN THE FOLLOWING CRITERIA:

AS COMMUNICATOR AND PROBLEM SOLVER

- * initiator of dialogue
- * information gatherer and provider
- * interpreter of information from other sources
- * ensure confidentiality of information shared during consultation. This might involve development and presentation of a basic set of core questions. The use of a variety of information including package

information, leaflets and other printed materials, information at point of sale will also become necessary.

AS QUALITY SUPPLIER

- * obtain products from reliable sources
- * ensure that good quality products are made available
- * provide good service
- * proper storage to ensure efficacy

AS TRAINER AND SUPERVISOR

- * embrace the philosophy of life long learning and continuing education
- * train and develop staff constantly upgrading their skills to deliver good quality information and service appropriate to their level of skills
- * establish protocols, treatment guidelines and operating procedures to ensure consistency in performing their responsibilities
- * assist in the training of community health workers/community representatives/carers and other appropriate lay people to extend the reach of pharmacy advice in countries where pharmacy services are inaccessible.

AS COLLABORATOR

- * Work in collaboration with other health professionals, consumers and patients and their representatives, community workers, social workers and other stakeholders with an interest in assisting the practice of self-care and health promotion. This also involves collaboration with pharmacy colleagues and national pharmaceutical associations to tap into their resources and expertise, in order to create opportunities to share experiences and to learn from each other.

AS HEALTH PROMOTER

- * participate in health screening to identify health problems and those at risk in the community.
- * participate in health promotion campaigns to raise awareness of health issues and disease prevention.
- * provide individual advice and consultations in order to help people to make informed health choices. ●

BOOK REVIEW

BY MERARI ALOMELE

THE VARIOUS USES OF
PAWPAW* Title: *THE PAWPAW (And its Several Uses)*

* Author: A. O. ABUDU, PhD

* Publishers: DYNOMEDIA LIMITED

* Pages: 31

The PAWPAW is a common fruit of the tropics and sub-tropics and those who normally enjoy it do so basically because it is a fruit and not because it has any special properties that make it more desirable than other fruits.

Research has, however, unravelled a few hidden secrets about the Pawpaw, secrets which will from now put this common fruit in a class of its own. In short, the ordinary Pawpaw has more to it than meets the eye, and this is exactly what Dr. A. O. Budu seeks to emphasize in his cute publication.

He calls Pawpaw (Papaya) a fruit for all reasons, for a very good reason. It has medicinal, commercial and industrial uses. But before enumerating these uses, he begins his book by identifying the Pawpaw plant which is botanically referred to as *Carica Papaya*.

He goes on to note that in West Africa, people tend to take the Pawpaw tree for granted. But as a fruit and when ripened, it has about 90 per cent of water, high amounts of carbohydrates, vitamin A, some C and trace minerals such as phosphorus, calcium and iron, which are all good for maintaining excellent health.

More so, as a dessert or snack, it helps in the digestion of the proteins in meat, eggs, milk, beans and cheese, and also prevents constipation.

The fruit can be used in the production of refreshing fruit drinks, jams, syrup, paste and puree. It is also used in the catering industry to garnish other sets of food, and as a substitute or supplement to diced garden eggs and pumpkins. "Peeled and diced pawpaw fruit make tasky additions and garnishes to both vegetable and fruit salads," Dr. Abudu writes.

The Pawpaw can also be used as a meat tenderizer, according to the author, who shows how this can be done. What about the industrial uses of Pawpaw?

"In some parts of the world, ethanol (or alcohol) is mixed with conventional derivatives of crude oil, e.g. petrol. This is then used in engines, to cut down on the high costs of fuel. In these times of high fuel costs, ripe pawpaw fruits can be used to produce alcohol and used to cut down on these fuel costs"

What the reader would be more fascinated about, however, is the medicinal properties of pawpaw. Among others, the author describes how it is used to treat common skin blemishes including stubborn pimple, boils, abscesses and septic sore. The leaves of the Pawpaw tree can be used to destroy worms in the stomach; they aid digestion, and act as an antidote to diarrhoea.

It also retards the development of arthritis and is used in cleaning the teeth, for checking unpleasant breath and as an anti-malaria medication. The author describes how it can be used to heal old sores, to solve athlete foot infections and for cleaning contaminated parts of the body. What about the use of the flowers for cough mixtures and the trunk for nutritious animals feed? Extract from the pawpaw tree can also be used in the brewing of beer, tanning of leather, in laundry, cosmetic preparations, the production of cheese and chewing gum.

Most sensational is the revelation that Pawpaw slows down the ageing process. How it does all these is what Dr. Abudu has accomplished in this very useful book with a colourful cover.

RATIONAL DRUG USE

"Towards Developing a Viable Drug Sub-Policy for the West African region"

Lecture delivered at the 12th General Assembly and Scientific Symposium of the WAPF
Accra, Ghana

By Dr. Ogori Taylor.

Dept. of Clinical Pharmacy and Biopharmacy, College of Medicine, University of Lagos, Nigeria.

February 1999.

INTRODUCTION

In 1985 WHO convened a conference of experts in Nairobi where rational use of drugs was defined as patients receiving "appropriate medications appropriate to their clinical need, in doses that meet their own requirements, for an adequate period of time and at the lowest cost to them and their community". This definition of rational drug use is based on the biomedical paradigm, which stresses an adherence in practice to scientific evidence and objectivity. However, use of medicines have been found to deviate greatly from evidence based principles. In the real world, the actual use of medication often bears little resemblance to principles of scientific therapy based on sound experimental or clinical data.

Most national drug policies have 4 components:

- * Ensuring or improving quality of medicines
- * Ensuring equitable access
- * Ensuring rational use
- * Establishing a viable local production

Since the adoption of the Essential Drug Program encouraged by WHO, there has been marked improvement in selection, procurement, supply and financing of pharmaceuticals in developing countries. Nevertheless little or no attention has been paid to appropriate use of drugs. Studies show that there is a relationship between increase in availability and drug use. Numerous drug utilisation studies in many developing countries show widespread irrational use of drugs. Despite the fact that pharmaceuticals represent an increasing share of private and public health care expenditures, for most governments, the issue of the adequate use of drugs remains a low priority.

The cost of irrationality in drug use is nevertheless enormous. The effort and resources expended in the drug management cycle involving selection, procurement, and distribution is made of no effect as long as drugs are used irrationally. Resources are wasted by both patients and the health care system through use of non-essential pharmaceuticals, use of drugs with doubtful efficacy, use of wrong or unsafe drugs, and use of incorrect dosages or routes of administration. The overall result is that the quality of medical care is compromised and hence increase in morbidity and mortality. Over-prescribing gives a message to the patient that they need medications for all conditions creating a dependence on drugs for most situations.

EXAMPLES OF IRRATIONAL USE OF
DRUGS

We shall examine some inappropriate use of drugs using examples from Nigeria.

PSYCHOSOCIAL IMPACT OF "A PILL FOR
EVERY ILL"

The Onitsha market businessmen have this bizarre practice of periodically "cleansing their blood of impurities. They are usually hospitalised by private practitioners. These practitioners inject diagnostic dyes into them and soon after, their urine becomes coloured. They believe that the drug is cleaning up their system and the resultant coloration of the urine is a testimony of the efficacy of the process. Thereafter, these practitioners follow up with intravenous infusion of normal saline and a diuretic. The patron's urine gradually attains the normal coloration and the patient is satisfied and rates the practitioner very highly. The cost of such an "overhaul" can be as high as

NI 00, 000 (about \$1,200)

Many industries in Nigeria now produce and commercialise antiseptic soaps. These are heavily promoted as indispensable for "preventing skin infections and for clear, bright and healthy skins". However in essence, the unsuspecting populace is being exposed to the risk of infections due to the creation of imbalance in the normal skin flora.

USE OF DRUGS OF UNCERTAIN SAFETY STATUS

There are dangerous products freely available in Nigeria and indeed the West African sub-region despite the fact that such products have been withdrawn or severely restricted in countries with strong regulatory authorities. An example is the NSAID phenylbutazone, which is popularly known as "buta". This is freely sold in patent medicine stores in Nigeria. One wonders the advantage this drug has over a myriad of safer, cheaper and equally effective NSAIDs in the market. The analgesic dipyron is a drug included in the Nigerian essential drug list despite the fact that it can cause life-threatening shock and potentially fatal blood disorders.

DRUGS WITH DOUBTFUL/ UNPROVED EFFICACY

There are drugs with doubtful efficacy that are freely promoted. Most pharmaceutical industries in Nigeria have various multivitamin and blood tonics, which are heavily promoted as providing strength, vitality, appetite and promoting growth in children. Most cough and cold remedies in Nigeria contain combinations with subtherapeutic doses of some components (a preparation in commerce contains 326 mg of acetaminophen, 2 mg chlorpheniramine among other active ingredients). The recommended dose is one tablet three times daily. One wonders the rationale behind the sale of such a combination that would detract from using the full therapeutic dose of paracetamol or chlorpheniramine if really needed by the patient.

USE OF WRONG DRUGS

Childhood diarrhoea is preferentially treated with antibiotics and/or anti-diarrhoeals. A simulated survey carried in December 1998 showed that a majority of pharmacists would prescribe antibiotics and anti-diarrhoeals without prior assessment of the infant, of the status of dehydration, cause of diarrhoea etc. ORS was rarely recommended by a few of pharmacists surveyed.

INCORRECT ADMINISTRATION

The use of chloroquine in subtherapeutic dose is an accepted norm in chloroquine prescribing in Nigeria. A survey of public and private clinics in Lagos State showed that only about 19% of chloroquine prescriptions were appropriate. Analysis of chloroquine injections in prescriptions showed that the norm was a total of 2 to 3 injections of 5ml chloroquine. This represents only 400mg to 600mg of chloroquine base instead of the normal 1500mg total dose for total chloroquine administration. The consequence is over-diagnosis of typhoid fever due to inability of patients to respond to subtherapeutic doses of chloroquine, and the perception that chloroquine resistant malaria is widespread.

OVERUSE OF INJECTIONS

In a survey of physicians in Lagos State, 43.3% of surveyed physicians believed that chloroquine injections are more effective than tablets while 20% believed tablets were more effective. Only 10% thought that both were equally effective. Thus injections are overused in these settings.

INCREASE IN COST AND IN RESISTANCE

The overuse of antibiotics in Nigeria is a threat to containing infectious diseases. Antibiotics are sold in market places, hawked in motor parks, sold in buses and in patent medicines stores by illiterates and unqualified persons. An example of irrational use of antibiotics is the use of 4 capsules of tetracycline to prevent sexually transmitted infections. An obvious and costly consequence of widespread abuse of antibiotics is the use of third generation cephalosporins instead of cheaper penicillins to treat gonorrhoea. It is possible

that as a result of ineffectiveness of penicillin or inability to obtain more expensive drugs, the prevalence has increased and traditional medicine men have taken over treatment of STDs. A study of antibiotic use in Lagos University Teaching Hospital showed the dilemma of physicians in treating infections. Combination drugs were predominantly used while switches to different combinations were very common. This is a reflection of the increase in resistance of common pathogens to the usual antibiotics.

Apart from unhindered use of antibiotics by the public, antibiotics were also shown to be over-prescribed, 46.3% of prescriptions in public health facilities and 37.5% of antibiotics in private health facilities were antibiotics. Stratification into age groups revealed that 70% of infants were prescribed antibiotics in public health facilities while 45.2% of infants received antibiotics in private facilities.

LACK OF OBJECTIVE INFORMATION

The industries through their medical representatives employ aggressive methods in advertising and promotion to generate sales. Information provided is often biased and incomplete. In spite of that, physicians find themselves dependent on the drug manufacturers for information about drugs.

Physicians in public health institutions in Lagos State admitted that their second most used source of drug information is the drug leaflet. Analysis of 189 leaflets of marketed drugs showed that information provided was incomplete and did generally follow laid down guidelines. In the absence of objective product information, physicians are rendered vulnerable to persuasive promotional practices designed to extol the merits of various drugs and induce purchase. Thus, it is often the pharmaceutical industry that exercises decisive influence over the physicians and ultimately the patient's choice about drugs.

Product education by pharmaceutical representatives has unintentionally contributed to the generation of spurious ideas about epidemiological patterns that may lead to inappropriate prescribing practices. Newer and more expensive drugs are promoted the most heavily. These are products, which are least known. The better known older and less expensive drugs are less promoted. Independent drug information which encourages rational use of drugs, can hardly compete with the sheer volume of promotion produced for doctors and consumers.

FACTORS AFFECTING THE USE OF DRUGS

There are problems that are related to rational use of drugs and these include:

- * Widespread availability of prescription drugs from itinerant peddlers, market stalls, unqualified drug sellers.
- * Increasing incorporation of western medicines into the local culture, leading to the adoption by traditional practitioners who are untrained in their use by the community for self-medication.
- * Deregulation and the expansion of the private sector as source of drugs with a corresponding commercialisation of drug supply and promotion.
- * Apparent lack of political will to implement programs for rational use of drug and to earmark funds towards this objective.
- * Lack of research into the extent of and reason for irrational use of drugs.
- * Uncoordinated activities involving rational use of drugs. These activities are sometimes mounted without involving all interested parties. In addition they take place in isolation and are not known or supported by the government. These are therefore ineffective in bringing about desired changes.

INTERVENTIONS INTO RATIONAL USE OF DRUGS: WHO SHOULD BE TARGETED?

Prescribers

It has been well established that to improve rational use of drugs, prescribers are influenced by pre- and post service

- * Choosing appropriate therapy for patients
- * Writing better prescriptions
- * Counseling patients more appropriately

This course should be incorporated into the curricula of all medical schools.

Dispensers

The dispensing aspect of therapy is usually taken for granted. Yet if it is inappropriately carried out it can nullify all efforts put into rational prescribing. Pharmacies in most health facilities are usually not well planned. This suggests that inception plans of health facilities do not usually take into consideration the pharmacy section. Consequently, the dispensing area is usually not conducive for patients to receive information on drugs. Most pharmacies do not offer the

pharmacist and patients direct contact or privacy needed for some complex explanation and feedback needed to ascertain the extent to which instructions have been understood and assimilated.

Communication skill should be part of continuing education of all health professionals to optimise practitioner-patient interaction. This is because research within the health disciplines indicates that inadequate practitioner-patient communication is often at the heart of expressions of dissatisfaction made by patients following consultation. Similarly, lack of compliance with health care and therapy is closely linked to the way in which information is conveyed.

Dispensers should continue to receive training on changing trends in the health care system. When I was a student in the 70s, one committed "high treason" if the name of the dispensed drug was indicated on the packaging material. Today it is irrational not to include this information. A survey of dispensing practice showed that pharmacists are not aware of this trend as well as other modern dispensing trends. ●

PUBLIC AND PATIENTS

The success of the therapeutic process still hinges on the patient's decision to comply despite receiving a right prescription that has been optimally dispensed. In the context of the West African sub-region, what a patient does is usually influenced by the views of the family, close friends and the community. It is no secret that an entire social network may be mobilised in a therapeutic decision. Without proper education in the appropriate use of drugs, people lack skill and knowledge to make informed decisions about how and how not to use their drugs. Public education therefore provides individuals and communities with information that enables them to use medicines in an appropriate, safe and judicious way. ●

SOME STRATEGIES TO REDUCE IRRATIONAL USE OF DRUGS

- * Establishment of pharmacy and therapeutics committees in public hospitals.
- * Development of standard treatment guidelines for major disease and disseminating such guidelines.
- * Development of ethical criteria for drug promotion and enforcement.
- * Establishment of drug information and adverse drug monitoring centers.
- * Incorporation of audit and feedback on drug use into monitoring and evaluation systems in health facilities.
- * Pre-service and in-service training of health care workers at all levels on rational use of drugs.
- * Incorporation of rational use of drugs into primary and secondary school curricula.
- * Establishing routine public education on drug use using available mass communication media (electronic and print media). ●

RECOMMENDATIONS FOR ACTION

1. Governments in the sub-regions should publicly endorse the rational use of drug components of their national drug policy and should establish national rational use of drugs co-ordination units to initiate, monitor and evaluate activities to promote the rational use of medicines. This unit should be supported by multisectoral advisory committees, appropriately qualified staff and operating budget.
2. Governments should establish national rational use of drug programs within the scope of their national drugs policies. In planning and implementation of these programs, all sectors should be involved for examples, relevant departments in the ministry of health and other ministries, health professionals, academia, industry and consumers. Rational use of drug activities by, in particular, non-governmental organisations, university and consumer groups should be supported.
3. Governments should ensure and facilitate training to appropriate levels of competence of all drug providers, including doctors, pharmacists, other health professionals and drug retailers.
4. Governments should foster cost-effective targeted interventions with measurable outcomes aimed at promoting rational use of drug at all levels of health care.

5. Health providers and consumers have a right to objective and usable drug information. Governments should ensure that this is generally available, for example, through health education programs, the news media and ethical drug promotion. National ethical criteria for drug promotion, based on the WHO Ethical Criteria for Medicinal Drug Promotion should be developed and enforced. Drug Information centers should be set up to serve health professionals and the public.

6. A new paradigm for a socially responsible industry is required. Both industry and national drug policies should redefine the product, not just as a drug, but as a medication process incorporating information services which must be related to health outcomes based on developed indicators. Honest and full information is an essential part of it. All parties should recognise that a socially responsible industry and profitability are compatible.

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THE PHARMACY COUNCIL OF GHANA

The pharmacy Council exercises its role in securing in the public interest the highest standards in the practice of pharmacy in the country.

By the provisions of the Pharmacy Act, 1994 (Act 489), it is required to ensure that courses and training in pharmacy at any institution in Ghana guarantee the highest possible standards in pharmacy.

Thus in consultation with appropriate educational institution, the council determines courses of instruction and practical training for pharmacy students. It is the prerogative of council to prescribe standards of professional conduct and ensure its enforcement though the disciplinary powers conferred on it. The Council is also required to keep a register of duly qualified and practising pharmacists and regulate distribution of pharmaceutical services in the country.

1998 REPORT

The Council stated in its report for 1998 that it maintained its policies of ensuring that pharmaceutical services are registered and well distributed in the country. Thus regulatory measures which were put in place the previous year, such as the suspension of registration of new pharmaceutical premises for the central business districts of Accra and Kumasi Metropolitan areas, limiting distance between premises locations were sustained.

According to the report there was a total of 229 new applications received in 1998 as against 165 in 1997. This represents an increase of 38.79% in numerical terms. Greater Accra and Ashanti regions continued to record the highest number of applications received and approved. The approval granted for the two regions

REGIONAL DISTRIBUTION COMMUNITY PHARMACIES AND LICENSED CHEMICAL SELLERS FOR 1997 & 1998

| REGION | 1997 | | 1998 | |
|-------------|----------------------|------------------|----------------------|------------------|
| | COMMUNITY PHARMACIES | CHEMICAL SELLERS | COMMUNITY PHARMACIES | CHEMICAL SELLERS |
| GT. ACCRA | 502 | 798 | 581 | 936 |
| ASHANTI | 165 | 1276 | 196 | 1429 |
| WESTERN | 24 | 957 | 28 | 1044 |
| EASTERN | 21 | 1214 | 25 | 1280 |
| VOLTA | 12 | 560 | 15 | 608 |
| CENTRAL | 14 | 791 | 16 | 904 |
| BRONG AHAFO | 11 | 833 | 15 | 969 |
| NORTHERN | 6 | 358 | 6 | 381 |
| UPPER EAST | 3 | 193 | 3 | 16 |
| UPPER WEST | 3 | 141 | 3 | 151 |
| TOTAL | 761 | 711 | 888 | 7918 |

Source: Pharmacy Council

constitute 86.2% of the national total for 1998. This trend, the report noted, might be attributed to the better business and infrastructural environment that these regions enjoy ●

Executive Secretary.

THE DILEMMA OF THE CHRISTIAN PHARMACIST

Joseph K. Adu
Accra.

Pharmacy enjoys a lot of respect from members of the public outside the health care team. This high level of respect makes the public demand from the pharmacists a level of social conduct that is not demanded of other people.

The practitioners of the profession, taking cognisance of their role and status in society, have also imposed upon themselves a code of ethics designed to ensure that the practice of Pharmacy in Ghana measures up to accepted international standards.

The Christian Pharmacist in addition to what society and the Society have imposed on him, by his faith in Christ, automatically accepts a higher code of conduct enshrined in the Bible. It is such that events, situations, acts and pronouncements that others would take for granted, must be decided by the Christian Pharmacist in the light of the uncompromising indicators of the Bible.

Many non-pharmacists irrespective of their background, believe that every Pharmacist is rich. Pharmacists, consciously or unconsciously, strive to be rich, perhaps to measure up to the image society have created for them. But at what cost should this be done? It can be very expensive to the Christian Pharmacist who has chosen christianity as a way of life.

Consider this Christian Pharmacist, consumed by the desire to ethically practice his profession and please his God as well. He attends meeting, conferences, etc organised by the Society. He observes colleagues including year mates, "juniors" and "seniors" come in their latest models of assorted cars, obviously expensive ones. Meanwhile he comes either in his 15 - year old model of an apology of a car which visits the mechanic more often than expected, or he still rides his "A-D-One-One," benevolently given to him by God right from the day of his birth! Meanwhile he is very much aware that some pharmacists are

registering to supervise premises for pharmacy business, get paid for that, yet are never present to do the job, but instead looms somewhere for more money. Can a Christian Pharmacist do the same thing when that "still small voice" persistently reminds him of Colossians 3:23 which exhorts him to work as though he was working for God and not man.

Place him in the community pharmacy and he has more things to worry about. This young girl comes and says that for some reasons she's been selfish in that she has been unable to make her voluntary monthly blood donation to mother nature! Or this respectable middle-aged man in the community comes confiding in him that he went wayward and he's now "hot". There is the urgent need for action. Poor Christian Pharmacist. Is he recommending a visit to the doctor for the "thing" to be taken care of, or is he recommending a medication for the same effect since it is only one week after the expected date; or is he going to counsel them not to touch it?

There are a lot of generic preparations on the market. A good number of them neatly packaged though, are of doubtful efficacy and very cheap. One can make a few extra cedis by patronising them. Can the Christian Pharmacist tread that path? A "just measure" is what the Bible asks for.

It is now becoming normal for some pharmacists who register to supervise the operations of pharmacies, use a substantial part of the time to go round selling drugs to other pharmacies, obviously to make more money. Dedication to duty is the way of the Christian.

Can the Christian Pharmacist find approval in the Bible to demand a six (6) month salary advance as a precondition to supervise a pharmacy, when it is obvious that the proprietor can invest this amount in the business to make it more profitable? Before he takes that decision he can hear, "do unto others what....."

When this Christian Pharmacist finds himself promoting drugs, would he be able to make "full and complete" disclosure of all there is about the brand, desist from unduly influencing prescribers, by whatever means, and make no financial gains from medical samples? The normal, what can be taken for granted by others, can be problematic to the Christian Pharmacist.

How can I forget? Extemporaneous preparations! It's another source of making money. There are all types of patents on the market. Fortunately these are no patents that can be approved and protected by any regulatory body worth its name: the formulae have been so altered without any proper analytical procedures to prove their efficacy. The goal is to reduce cost and maximise profit. Would the Christian Pharmacist's Biblical standards permit?

The Christian Pharmacist is confronted with other situations for which he needs to make sound decisions which are not made any easier by the requirements of the Bible. When the patient cannot afford to pay for the prescription, even on very soft credit terms, what should be his reaction? Would he give the medicines to the patient free of charge? Or would he pray for him and ask him to have faith in God for healing? James 2:14 - 17 would always be there: faith without works is dead.

In the Research and Regulatory institutions, the Christian Pharmacist comes face to face with some of the juiciest temptations. Any slip under the weight of these temptations would weaken his resolve to religiously enforce the regulations.

In the pharmaceutical industry, the Pharmacist is the expert in formulation and manufacturing. There is the temptation to use substandard materials and methods, ignoring current Good Manufacturing Practices (GMP). Can he stand up to the challenge?

I believe that the Christian Pharmacist wherever he finds himself must stand up to the challenge launching his attack and defence on the time - tested principles of Christianity and those of the Profession and in the end the glory would be to God.

Let the christian pharmacist be resolute in standing for the upliftment of the glory of God in the practise of his profession and be guided by the fact that "though the afflictions of the righteous are many, God will see him through all." AMEN ●



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| 4. CO-TRIMOXZOLE 400MG. | 1 X 1000 | 4. PARACETAMOL 500MG. | 1 X 1000 |
| 5. DIAZEPAM 10MG. | 1 X 1000 | 5. TETRACYCLINE CAPSULE 250MG. | 1 X 1000 |
| 6. DIAZEPAM 5MG. | 1 X 1000 | 6. CLOXACILLIN CAPS. 250MG. | 1 X 1000 |
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| 8. GRISEOFULVIN 125MG. | 1 X 1000 | 8. CHILOROQUINE PHOSPHATE 250MG. | 1 X 300 |
| 9. MEBENDAZOLE 100MG. | 1 X 1000 | 9. METRONIDAZOLE TAB 200MG. | 1 X 1000 |
| 10. METRONIDAZOLE 200MG | 1 X 1000 | 10. ALUMINIUM HYDROXIDE 500MG. | 1 X 750 |
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| 13. PENCILLIN V. 250MG. | 1 X 1000 | | |
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| 7. TETRACYCLINE 250MG. | 1 X 1000 | 7. VITAMIN B. COMPLEX 125ML. | 1 X 60 |
| | | 8. VITAMIN B. COMPLEX 1000ML. | 20 X 1LTR |
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| | | 14. HAEMOGLOBIN WITH B+ L1000ML., | 1 X 60 |
| | | 15. NUTRAMIN DROPS 15ML. | 1 X 30 |
| | | 16. VITAGLOBIN 200ML. | 1 X 24 |
| | | 17. ASCORYL 125ML. | 1 X 60 |
| | | 18. VITACAL SUSP. 200ML | 1 X 24 |
| | | 19. AMOXYCILIN SUSP. 60ML. | 1 X 60 |
| | | 20. AMPLICILIN SUSP. 60ML. | 1 X 60 |
| | | 21. CO-TRIMOXZOLE SUSP. 100ML. | 1 X 60 |
| | | 22. METRONIDAZOLE SUSP. 100ML. | 1 X 60 |
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THE EFFECT OF MALNUTRITION ON DRUG ABSORPTION

Alexander N. O. Doodoo, Ph. D. MPSG & M Jayne Lawrence, Ph.D., MRPharms

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Despite the fact that a great proportion of the inhabitants suffer from varying degrees of protein-calorie malnutrition (PCM), very little work has been done to examine the effects of PCM on drug absorption, distribution, metabolism and excretion. Drs Alexander Nii Oto Doodoo and M Jayne Lawrence of the drug Delivery Research Group at King's College London provide a brief comment on PCM and drug absorption and call for intensive research on the effects of PCM on drug absorption, distribution, metabolism and excretion.

INTRODUCTION

Malnutrition, particularly protein-calorie malnutrition (PCM) is a major problem for the majority of the world's population, especially for inhabitants of the Third World. In a survey using the World Health Organization's Database on Child Growth, de Onis et al. (1993) found that nearly one-third of all children under the age of five are affected by varying degrees of PCM. PCM however, is not restricted to the Third World. In several developed countries, PCM may occur as a result of chronic and/ or malignant disease (Freeman et al., 1983) and is also thought to affect nearly half of all patients in hospitals and nursing homes. With such wide- spread occurrence it is quite surprising to observe how little research has been done in relation to the effects of PCM on drug absorption, distribution, metabolism and excretion.

During the early stages of drug development, studies are carried out in healthy subjects to examine the pharmacokinetics and pharmacodynamics of new chemical entities. Subsequent larger scale studies often involve select groups of patients but rarely, if ever, have studies been carried out to examine specifically the effect of malnutrition on drug handling. Yet some of the biochemical effects of PCM e.g. hypoalbuminaemia is likely to affect the plasma concentration of highly-protein bound drugs like phenytoin and prednisolone leading to toxicity should these drugs be administered at normal doses. Furthermore, since PCM results in diminished biosynthesis of drug metabolising enzymes, it is likely that the metabolism of several groups of drugs will be resulting in increased plasma concentration and subsequent toxicity. The need for increased research to address some of these issues cannot therefore be overemphasised.

PCM AND DRUG ABSORPTION

Malnutrition causes widespread morphological and functional changes in the gastrointestinal tract. The morphological changes include a decrease in the weight and length of the small intestine, a loss of glycocalyx, a shortening and breaking of the microvilli, and an increased fluidity and

decreased maturation of the microvillus membrane (Bhagwat et al., 1983; Touhami et al., 1983, Ribeiro et al 1985). These changes in the main absorptive organ of the body (i.e. the GIT) are likely to be accompanied by changes in the way that the organ function. Research undertaken so far indicate that in PCM, there is altered absorption of water, ions, solutes and nutrient substances (Adibi et al 1970; Garcia-Aranda et al.,1984; Wapnir et al., 1985; Wapnir and Lifshitz, 1985, Gupta et al., 1994) by the GIT.

The changes listed above, particularly the altered absorption of nutrients has potentially very serious implications for drug delivery via the gastrointestinal tract (see table 1). This is because several important classes of drug substances are close structural analogues of nutrients and as such exploit the endogenous (generally active) transport mechanisms of the latter for their gastrointestinal absorption. Examples of such drugs include beta-lactam antibiotics (Kramer et al., 1990) and angiotensin converting enzyme inhibitors (Friedman and Amidon, 1989) which are transported via the dipeptide transporter(s), methyl dopa carried by an amino acid transporter (Hu and Borchardt, 1990), and salicylic and related acids transported via the monocarboxylic acid transporter (Takanaga et al., 1994; Tsuji et al., 1994). In addition, because of the increased fluidity of the intestinal membrane caused by PCM, the absorption of passively transported therapeutic agents could also be altered.

TABLE 1: Examples of drugs whose absorption may be altered in malnutrition

| Class of Drug | Examples | 1.1.1 Transporter involved |
|--|--|----------------------------|
| Beta-lactam antibiotics | Cephalexin, Cefadroxil | Dipeptide |
| Angiotensin-converting enzyme inhibitors | Captopril, Enalapril, Fosinopril, Lisinopril | 1.1.2 Dipeptide |
| Amino acid analogues | Alpha-methyl dopa | Amino acid |
| Salicylic and related acids | Aspirin (acetylsalicylic acid) | Monocarboxylic acid |

From the above it can be seen that the effects of PCM on drug absorption alone can be quite significant. It is therefore important to initiate research in this area. Since PCM per se is not a problem in the developed economies of the world (where most scientific research also occurs), the onus to initiate this research falls on workers in developing countries most of whom are already grappling with poor and / or absent facilities and the capacity to carry out research. The best way forward might be strategic collaborative research between groups in both developed and developing countries. The results of such research will yield answers not only on PCM and drug absorption but also on the principles and processes (many of them still unknown) governing drug absorption from the gastrointestinal tract. ●

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Misoprostol is a synthetic prostaglandin E1 analogue, which is a potent inhibitor of gastric acid secretion. When used in combination with diclofenac, its ability to decrease gastric acid secretion has resulted in a decreased incidence of gastric ulceration.

DRUG (and examples of trade names) RELATIVE RISK (95% CI)

| | |
|------------------------|---------------|
| ibuprofe (Brufen) | 1.0 |
| feopropfen (Fenopron) | 1.6 (1.0-2.5) |
| aspirin (Aspirin) | 1.6 (1.3-2.0) |
| diclofenac (Votlaren) | 1.8 (1.4-2.3) |
| sulidac (Clinoril) | 2.1 (1.6-2.7) |
| diflunisal (Dolobid) | 2.2 (1.2-4.1) |
| naproxen (Naproxen) | 2.2 (1.7-2.9) |
| indomethacin (Indocid) | 2.4 (1.9-3.1) |
| tolmetin (Tolectin) | 3.0 (1.8-4.9) |
| piroxicam (Feldene) | 3.8 (2.7-5.2) |
| ketoprofen (Myproflam) | 4.2 (2.7-6.4) |
| azapropazone (Rheumox) | 9.2 (4.0-21) |

DRUGS IN PREGNANCY

Fertility affected by alcohol consumption

Experts have suggested that alcohol can affect the hormone balance in women which in turn may cause problems with ovulation. Danish researchers assessed the validity of this statement in a study that included 430 couples who were trying to conceive for the first time. The average weekly alcohol consumption was 4 drinks for women and 9.5 drinks for men. 64% of women who consumed less than 5 drinks per week conceived compared to 55% in women who had a higher intake. The figures for men were 67% and 58% respectively. Further statistical analysis confirmed that conception is more likely in women who drink 1 to 5 drinks per week as opposed to woman who drink more than 10 drinks per week.

Decreased fertility has been noted in women who are heavy drinkers but this is the first time evidence has confirmed decreased fertility in women who are moderate drinkers. This may have important implications in women are having difficulties in falling pregnant.

NON-STEROIDAL ANTI-INFLAMMATORIES - COMPARATIVE TOXICITY PROFILES

Non-steroidal anti-inflammatory drugs (NSAIDs) cause a slight increase in blood pressure and may interfere with antihypertensive treatment. As this is particularly noticed in elderly people, it is important that their blood pressure is regularly monitored if they are on long term NSAIDs. The side effects of main concern, however, are the gastric side effects, which are commonly know to be caused by all NSAIDs.

A meta-analysis of the variability in the risk of gastrointestinal complications showed clear differences between the various NSAIDs.

COMPARATIVE TOXICITY OF NSAIDs, USING IBUPOFEN AS THE REFERENCE

In an attempt to reduce the side effects profile, the following anti-inflammatory drugs have been developed.

* Diclofenac / misoprostol combination (e.g. Arthrotec®):

* Selective cyclo-oxygenase 2 inhibitors (e.g Mobic):

Cyclo-oxygenase 2 plays an important role in the inflammatory process. By selectively inhibiting cyclo-oxygenase 2, the drug can exert its anti-inflammatory effect, causing a relatively low incidence of gastrointestinal or renal side effects.

There are two additional ways of aiding patients requiring long term NSAIDs:

* The long term adverse effects of NSAIDs can be avoided by starting patients suffering from rheumatoid arthritis on antirheumatic drugs at an early stage of the disease. These drugs are more beneficial than NSAIDs, as they reduce the long term disability in rheumatoid arthritis.

* Many of the adverse effects of the NSAIDs are dose related. Trials have shown that NSAIDs used together with paracetamol, can produce the same therapeutic effects as a higher dose of the NSAIDs used alone. Therefore, by using the combination, the adverse effects experienced by the patient may be minimised. ●

Micromedix: drug evaluation monogram

BMJ, 1998; 316: 1810 - 1811

PERSONAL

This column is intended for social announcements. The charge for an insertion under the heading is ₵ 50,000.00 for not more than 25 words, and ₵25,000.00 for every additional 10 or few words. Payment (in the form of personal cheques only, payable "The Pharmaceutical Society of Ghana") should be forwarded with the notice, which should be authenticated by the name and address of the sender, to: *The Editor, The Ghana Pharmaceutical Journal, P.O. Box 2133, Accra, Ghana.*

FDB ALERT NOTICE

TROVAFLOXACIN AND ALATROFLOXACIN - SERIOUS SEVERE AND UNPREDICTABLE LIVER INJURIES

EMEA, the European Agency for the Evaluation of Medicinal Products has published a Press Release drawing attention to new information concerning the recently-approved fluoroquinolone antibiotics, trovafloxacin (Trovan, Turvel; Pfizer, Roerig) and alatrofloxacin (Trovan IV, Turvel IV; Pfizer, Roerig).

Since February 1998, 140 documented cases of serious hepatic events have been reported, including 8 spontaneous cases in which patients died or required a liver transplant (among these there were 4 cases of hepatic necrosis). The review of the cases shows that in 35% of cases the reported liver/biliary events were accompanied by a hypersensitivity reaction. In addition, the occurrence of liver injuries varied between 1 to 60 days after the start of treatment. These data suggest that the onset and the severity of the liver injuries are unpredictable. In the light of the new information, the Committee for Proprietary Medicinal Products (CPMP) has started to reassess the risk/benefit balance of these products.

* Following an initial review, the CPMP wishes to inform patients and prescribers as to the unpredictability and potential severity of liver injuries. The expected benefit of the treatment has to be assessed on a case-by-case basis by the prescribing physician in the context of this new information.

* The current patient information leaflet already states that patients should be informed to stop treatment immediately and consult their doctor if they develop symptoms suggestive of a hypersensitivity reaction (skin rash, hives, face oedema, arthralgia, etc.).

*The risk of re-exposure of the product to patients should be assessed on a case-by-case basis because of the possible immuno-allergic nature of the effect.

* In addition, patients should be informed to stop the treatment immediately and consult their doctor if they develop signs and symptoms suggestive of liver or pancreatic injury (fatigue, anorexia, yellowing of the skin and eyes or severe upper stomach pain with nausea and vomiting or dark urine).

The indications for these products are as follows:

* alatrofloxacin (5 mg/mL concentrate for solution for infusion in 20, 40 and 60 mL vials) is currently authorised for the intravenous treatment of community-acquired pneumonia and nosocomial pneumonia (mild, moderate and severe), complicated intra-abdominal infections and acute pelvic infections, complicated skin and soft tissue infections.

* trovafloxacin (film coated tablets 100 mg and 200 mg) is currently authorised for the oral treatment of community-acquired pneumonia and nosocomial pneumonia (mild, moderate and severe), acute exacerbations of chronic bronchitis, acute sinusitis, complicated intra-abdominal infections, and acute

pelvic infections, salpingitis, uncomplicated gonococcal urethritis and cervicitis and chlamydial cervicitis, and complicated skin and soft tissue infections.

Reference: Press Release: Trovan / Trovan IV / Turvel / Turvel IV (Trovafoxacin/Alatrofoxacin) - Serious, severe and unpredictable liver injuries, London, 20 May 1999 (Reference no. EMEA/15770/99).

TOLCAPONE (TAMAR) - LIVER FAILURE: SUSPENSION & WARNINGS

European Union. The European Agency for the Evaluation of Medicinal Products has issued a recommendation for the suspension of the marketing authorisation for tolcapone (Tasmar; Roche), which is indicated for the adjunctive treatment of Parkinson's disease. Tolcapone was approved in the EU in August, 1997.

The agency issued a notice concerning hepatic reactions associated with tolcapone on 15th October, 1998, after receiving information from the manufacturer concerning 9 reports of serious abnormal hepatic function, including 6 cases of probable hepatitis (two of which were fulminant). Two of these patients died. As a result of these reports, the manufacturer revised the prescribing and patient information to reinforce the necessity for liver function monitoring and to increase the frequency to every two weeks.

By the end of October 1998, reports of neurological adverse events, including new reports of rhabdomyolysis, were received based on this information, added to the problems of hepatotoxicity (and another fatal report), the Committee for Proprietary Medicinal Products (CPMP) concluded that tolcapone can no longer be safely administered for the following reasons:

* serious hepatic reactions occur unpredictably and liver monitoring does not seem able to identify the possibility of development of severe, sometimes fatal, hepatic disease.

* taking into consideration the hepatotoxicity of tolcapone, as well as the possible occurrence of rhabdomyolysis and neuroleptic malignant-like syndrome, the overall benefit to risk balance of tolcapone was considered to be unfavorable in the authorised indication and it was not considered possible to restrict the indications sufficiently to permit safe use.

Portugal, based on the CPMP opinion, the Institution Nacionalda Farmacie do Medicament has decided to suspend the marketing authorisation for tolcapone with effect from 17 November, 1998.

United States of America. The Food and Drug Administration and Hoffmann-La Roche, (the manufacturer of Tasmar in the USA) have jointly advised doctors about the reports of fatal liver injury associated with the use of tolcapone and alerted them to the labeling changes and the reports of three deaths from acute, severe (fulminant) liver failure.

Roche. The manufacturer issued a Media Release about the label change in the USA and the suspension of tolcapone in the European Union, stating that it now recommends tolcapone only for a restricted group of patients suffering from Parkinson's disease who do not respond satisfactorily to other therapies, but cautioning about reports

of unexpected adverse events, including 3 fatal cases of unpredictable fulminate hepatitis.

PHARMACY COUNCIL 1999 CONTINUING EDUCATION PROGRAMME FOR ALL REGISTERED PHARMACISTS

The Pharmacy Council in collaboration with the Pharmaceutical Society of Ghana wish to inform all registered pharmacists in the country that the 1999 Continuing Education Programme is scheduled as follows:-

| DATE | SECTOR | VENUE |
|---------------------|----------|--------|
| 24th June, 1999 | Northern | Temale |
| 22nd July, 1999 | Southern | Accra |
| 5th August, 1999 | Southern | Accra |
| 26th August, 1999 | Middle | Kumasi |
| 2nd September, 1999 | Southern | Accra |

The programme would discuss among others, subjects like:

- a) Hypertension
- b) Principles of Management
- c) Law of Contracts and Torts

Advance Registration for the programme should be made at the Pharmacy Council Offices in Accra, Kumasi, Sekondi, Koforidua or Temale, depending on the date of attendance.

Participation fee: ₵50,000.00

All registered Pharmacists should please note that attendance and active participation in Continuing Education programmes shall be a pre-requisite for retention of name on the Register of Pharmacists.

AG. REGISTRAR.

TWO PHARMACEUTICAL FIRMS MERGED

Two giant pharmaceutical companies, Zeneca Group PLC and Astra AB have merged to form the Astra Zeneca PLC.

The merger arrangements which were signed in April, 1999 took effect on June 1, 1999.

Zeneca is represented in Ghana by the local scientific office and its pharmaceutical products distributed by Ernest Chemist Limited.

The new unified company officially begins operation as a single entity placing it in number three position in the League of innovative giant pharmaceutical companies with market capitalisation of US \$75 billion.

The major therapeutic areas covered by Astrazeneca currently are Cardiovascular, Gastrointestinal, Oncology, Pain and Anaesthesia, Respiratory CNS and infection.

With its huge research and development budget, Astrazeneca hopes to continue to be in the forefront of the pharmaceutical world in the coming millennium.

WHO APPEALS TO TOBACCO FARMERS

WHO's Tobacco Free Initiative (TFI) is a major project supported by Director General Dr. Gro Harlem Brundtland. It is estimated that tobacco kills four (4) million people annually and that this could increase to 10 million per annum by 2020.

The tobacco industry is focusing more on developing countries. It is thought that in China, smoking causes 75,000 deaths per year. By the time today's young people reach middle age, this figure will increase to three (3) million deaths.

The International Tobacco Growers Association (ITGA) is especially concerned that projects like the TFI will threaten the livelihood of its members, many of whom rely heavily on tobacco crops for survival. The ITGA says that the economic implications will be especially devastating in developing countries.

WHO is committed to the reduction of tobacco use but at the same time realises that economic hardship in already disadvantaged countries will not lead to improved health outcomes. WHO has started to investigate means to identify solutions that will soften the economic impact of tobacco use restriction, including setting up a panel of economic experts and soliciting donation schemes to assist in the transition from tobacco to other sustainable crop in vulnerable regions.

By working together, WHO and ITGA can reduce the demand for tobacco and find viable agricultural alternatives to its supply.

Source: WHO Press Release/15, 3 March 1999.

HELPING MORE SMOKERS HELP THEMSELVES

More than a third of all adults in the world smoke. Most of these people are dependent on tobacco, which will kill 50% of them prematurely. With such a large proportion of society affected, there is a large variety of smokers and, corresponding to this, a large variety of individual needs and wants. The concept of comprehensive tobacco control to address the tobacco pandemic is well established, and Tobacco Dependence is registered in WHO's International Classification of Disease (ICD 10, F17). As such, the need and role of medical support is well established. Multiple action is necessary, if the broad range of needs is to be addressed. Comprehensive support for Tobacco Dependence recognises the value of a broader approach to treatment, from a range of products and providers to address the needs of the widest population of tobacco users. Self-medication treatments like nicotine

replacement therapy (NRT) fulfil a vital option for vast number of smokers who would never contemplate seeing their doctor, or visiting a specialist clinic to help them with their smoking problem.

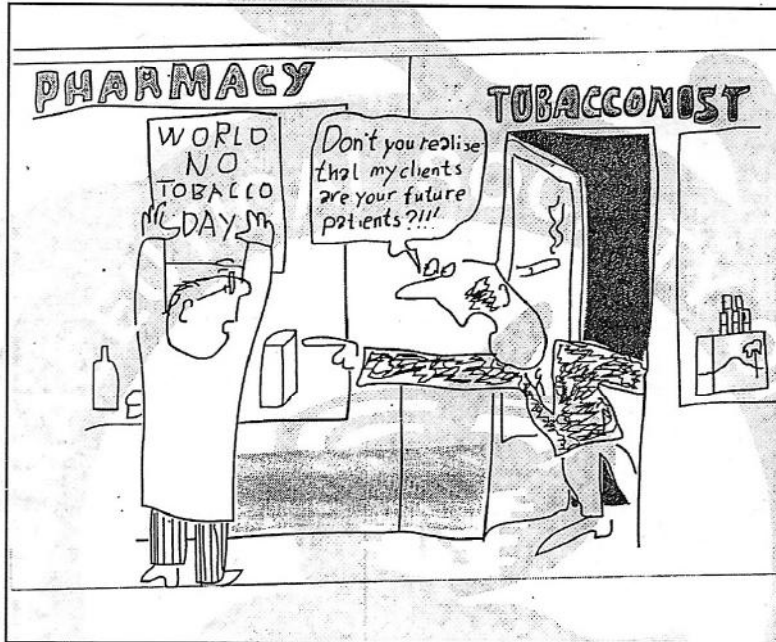
The need to help the smoker in a comprehensive tobacco control policy is recognised more if this year's World No Tobacco Day (WNTD) is any indicator. For this is the first year that the theme is on smoking cessation, with the encouragement to 'leave the pack behind'. The vital role of NRT is recognised and WHO's Director General calls for it to be more widely available. This is a joint responsibility for the pharmaceutical industry, healthcare providers and others who have an influence on public health. WHO has referred to the preparation of this year's WNTD as a partnership with a purpose and the World Self Medication Industry is proud to play its part, working with FIP and the other health professions.

In response to call from those involved in tobacco control, the pharmaceutical industry takes an active role in working together to reduce tobacco related death and disease. WSMI has formed a Task Force on Tobacco Dependence, composed of representatives of companies with an international involvement in tobacco dependence self-medication. It is a groundbreaking action, and has been the result of each company's willingness to set aside certain competitive differences and find a common basis for co-operation to the overall benefit of public health. WSMI looks forward to strengthening its relationship with FIP and, through this new group,

working together on future tobacco dependence initiatives.

David Graham

Director Tobacco Dependence Projects
World Self Medication Industry



ABBOTT LABORATORIES WINS PRIX GALIEN

Abbott's product ritonavir (Norvir) was awarded the fifth International Prix Galien for innovation in drug development, according to an Abbott News Release on 10 February 1999.

Ritonavir was the first protease inhibitor that demonstrated reduced mortality in advanced AIDS patients. Ritonavir is one of the drugs that is used in combination therapy, commonly known as the HIV drug cocktail.

Abbott experienced manufacturing difficulties with the ritonavir capsules in July, 1998 when the crystalline form of the medicine appeared in the production process. Since then, only the oral solution has been available.

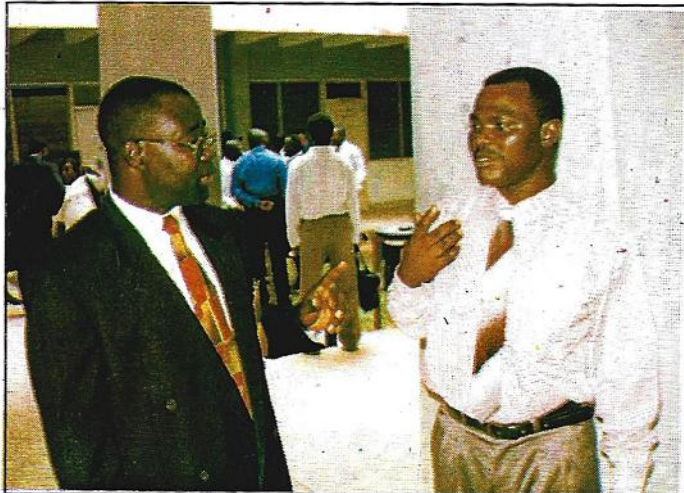
On 31 March 1999, Abbott announced that they submitted an application to the US Food and Drug Administration for reformulated capsules designed to accommodate the crystalline form of the drug. There is no indication when the FDA will approve the new formulation. In the meantime, the oral solution will remain available to patients. ●

NAMES IN FOCUS

EXECUTIVE SECRETARY

The Pharmaceutical Society of Ghana (PSGH) now has an Executive Secretary in charge of the Secretariat. The appointment of 43-year old Mr. Samuel Nkum Tenkorang ended years of discussions about the need to employ a pharmacist on full-time basis at the secretariat. Mr. Tenkorang, a native of Koforidua, graduated from the Faculty of Pharmacy, UST, Kumasi in 1982. His pre-registration training was at the Tetteh Quarshie Memorial Hospital Mampong-Akwapim (1982-84).

He then proceeded to work as the Supt. Pharmacist/Branch Manager, John Lawrence Chemists Ltd., Accra from 1984-88. He later joined Danafco Ltd., where he rose to the position of Pharmaceutical Sales Manager for Greater Accra. After his two-year stint at Danafco, Mr. Tenkorang moved to the Ghana Consoli-



dated Diamonds Ltd., Akwatia. He left GCD (1990-1996) as the Senior Hospital Pharmacist. From 1996 till his appointment as the Executive Secretary of PSGH, Mr. Tenkorang was a Medical Representative working with Gokals Ltd., Accra.

Mr. Tenkorang had a lot of training that prepared him for the various positions he held and eventually for the task at the Secretariat. In August 1989, he attended the Beecham Products International Sales Training Course. In June 1989 and May 1990, respectively, he attended the MDPI Marketing Training and MDPI Stock Management and Control Programmes. He is currently a Part II Fellowship student of the West Africa Post-Graduate College of Pharmacists.

Mr. S. N. Tenkorang who is happily married with 4 children, is an Associate Member of the Chartered Institute of Marketing, Ghana (CIMG). He is also a member of the Legon Tennis Association, Vice President of the Ghana Chess Association and member of the Medical Team of the Kaneshie Presby Church.

Mr. Tenkorang has made presentations at previous AGMs of the Society. These include "Extending Qualified Pharmaceutical Service to the Rural Areas" (1986), "The Impact of Pharmaceutical Services on Primary Health care in Ghana" (1994), and at the AGM of the Ghana Institute of Planners he presented a paper on "Professional Bodies and Changing National Development Demands" (1997).

Having a pharmacist working full-time at the Secretariat is expected to facilitate the work of the PSGH, bring more professionalism to the Secretariat, and ensure a smoother and effective implementation of the programmes and decisions of the Society.

Against his background, Mr. Tenkorang makes a passionate appeal to all colleague Pharmacists: "now you have your own colleague at the Society's Secretariat who shares and identifies with the vision and aspirations of the Society. I sincerely hope that you will contribute by way of suggestions, constructive criticism and financially, to make our great Society and cherished profession better in the coming years".

As we say *Akwaaba* to Mr. Tenkorang, on your behalf we say congratulations, and wish him well as we pledge our fullest support to him.

EDITOR

Mr. Joseph Yaw-Bernie Bennie, a member of the Editorial Board has been appointed Editor of the Pharmaceutical Journal. His appointment followed the appointment of Mr. Tenkorang, the then Editor as the Executive Secretary of the Society.

Mr. Bennie's appointment, made by the Standing Executive Committee has

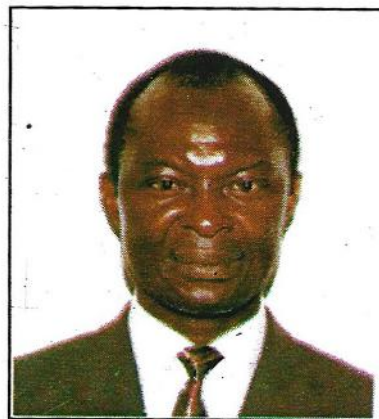
been confirmed by the National Council at its meeting held at the Pharmacy Council on 19th June, 1999.

The Editor is a product of the Faculty of Pharmacy, UST, (1988). He had his internship at the then GIHOC Pharmaceuticals Company Ltd., and the Pharmacy Department of Korle-Bu Teaching Hospital. He then worked with GIHOC till 1992 when he resigned on gaining admission to the School of Administration University of Ghana, Legon.

He is a co-founder and Director of JOSDAV CHEMISTS Ltd., Kaneshie which was established in 1993. In 1994 he graduated with a Master of Business Administration (MBA) from the School of Administration, UG, Legon. He is a member of the Chartered Institute of Marketing, Ghana.

Mr Bennie also holds a Graduate Diploma in Communication Studies, from the School of Communication Studies (SCS), Legon. He has just completed the MPhil Programme in Communication Studies at the SCS, Legon with the submission of his thesis titled. "The Mobilisation of Health Behaviour by the Press in Ghana".

Mr Bennie has to his credit a lot of articles which have been published in "The Mirror", the "Daily Graphic" and the "High Street Journal". ●



C.I.M.G PRESIDENT

Mr. Harrison Kofi Abutiante has been elected the President of the Chartered Institute of Marketing Ghana (CIMG) for the period 1999-2000.

Mr. Abutiante, a pharmacist by profession, graduated from the Faculty of Pharmacy, Kwame Nkrumah University of Science and Technology in 1969. Harry, as he is known

by his friends would be 57 years old in October. He hails from Biakpa-Avatiame (V.R.). He is married with four children. Mr. Abutiante spent most of his early working life with Merck Sharp & Dohme International. Between 1969-1974, he was the Country Manager (Ghana) for MSD. He became the West African Manager from 1975-78. For a period of nine years, Harry worked as the Zone Manager East and Central Africa. During his last years with MSD, he worked as the Zone Manager, West Africa from 1987 to 1989.

Mr. Abutiante, a Council member of the Trinity United Church, Legon, is a co-founder and MD of Paracelsus Pharmacy and Marketing Company Ltd., which was established in 1989. Paracelsus is associated with the Alcan range of eye care preparations. Harry has served the pharmacy profession in different positions. He has been a Director of Danafco from 1993 and 1996 respectively, he has been a member of the Management Committees of the Ghana Co-operative. Pharmaceuticals Ltd., and the Ghana Pharmacists' Credit Union. From 1994-1998, he served as the National President of GPPA; Honorary General Secretary of PSGH (1977-78), Chairman, Building Project Committee (1997 to date) and member of the PSGH, Disciplinary committee from 1997 to date.

Mr. Abutiante has other educational qualifications. In 1987 he obtained a certificate in marketing from the Chartered Institute of Marketing (U.K.). In 1998 he attained the status of a Chartered Marketer of the CIM (U.K.). From 1996-1998 he has taken the Parts I and II Fellowship of the West African Post-Graduate College of Pharmacists. Harry has been a member of the Governing Council of CIMG and Chairman of its Membership Committee from 1993. As president of the Glaucoma Associate of Ghana (GAG), he has been in this position for the past six years.

Mr. Abutiante has some publications to his credit. These include, "Private Pharmacy Practice in Ghana," 1995, "Orthodox versus Herbal Drugs in our Health-care System" 1997; "Legal validity of Prescriptions Received by Community Pharmacists from Private Medical Practitioners in Accra," 1998.

Dear colleagues, as we congratulate Mr Abutiante on his election as the CIMG President, and wish him God's success during his tenure of office, may we remind him to continually be a friend of the human race even in his marketing activities. ●



A DISTINGUISHED PHARMACIST

Professor Arnold Beckett
OEO PhD, DSo, BSc, FRPharms,
Hon DSc's (Heriot Watt, Leuven, Uppsala)

He has Published 465 research paper, educated 95 PhD students, and was the joint founding editor of the distinguished International Journal of Medicinal Chemistry.

Professor Beckett's professional association with Ghana stretch back many years. During the 1960's and 1970's he was an external examiner, both during

Professor Beckett was Head of the School of Pharmacy at Kings College, London for 25 years,

the periods when Eric Allman and Professor Tackie were Deans of The School of Pharmacy, Kumasi. A number of senior staff from the School of Pharmacy in Kumasi, will know Professor Beckett well as they were actually students of the School of Pharmacy in London when Professor Beckett was Head of the School.

His professional posts have included President of the Royal Pharmaceutical Society, Chairman of the Board of Pharmaceutical Sciences, and a member of the Medical Commission of the International Olympic Committee. In addition to the many honorary doctorates and many national and international awards, Professor Beckett was awarded the OE for these contributions.

With patented products on world markets, Professor Beckett's current research interests are the design of new therapeutic products and their interaction with Biological systems, including natural products ad complementary medicines.

Prof. Beckett was a guest of the PSGH on the occasion of the 1998 AGM held in Cape Coast during which he spoke on the topic "Changing Role of Pharmacy" ●

CALENDER

THE GHANA PHARMACEUTICAL JOURNAL

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59th International Congress of FIP,
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3. 3rd World Meeting on Pharmaceutics
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Pharmaceutical Technology
Berlin.
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EUFEPS AND FIP
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4. BIO '99 INTERNATIONAL
FIP Bio-International '99 CONFERENCE
VENUE: The Royal Pharmaceutical Society of Gt. Britain
1. Lambeth High Street,
London SE 1 7JN, GB.
DATE: 29 September - 1st October, 1999.
For more information & registration,
Please Contact PSGH Secretariat.
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LETTER TO THE EDITOR LETTER TO THE EDITOR

THE GRACE PERIOD

Dear Sir,

The Pharmacy Council deserves a lot of commendation for the effort at ensuring that the practice of Pharmacy in Ghana is both legal and ethical.

However, there is an aspect that needs to be re-examined. It has to do with non-pharmacists in the Pharmacy practice. Specifically it borders on the advantage taken by non-pharmacy proprietors during the "grace period" allowed by the Pharmacy Council for the renewal of licences for premises.

It is to be assumed that proprietors would use that period (January - April) to re-negotiate new service conditions with their Pharmacists or to engage new ones.

The reality of the situation is that such pharmacies operate without pharmacists for those months since in most cases the pharmacists would have sought employment elsewhere, for obvious reasons. It is my opinion that the Council has been too liberal, if not too lenient in the application of the law in this regard. Pharmacies without suprintendent Pharmacists should not be allowed to operate for any period in contravention of the law. All negotiations for re-engagement or engagement of Pharmacists to supervise premises should be conducted within the period of September to December and all licences for premises should be deemed to have expired on Decembeer 31 and the law made to apply. Most of these pharmacies operate well beyond the "grace period" with serious consequences.

In some situations the proprietor negotiates with another Pharmacist without the knowledge of the incumbent superintendent pharmacist, who invariably loses his/her job. The newly engaged pharmacist is also bound to lose part or all of his salary since such proprietors argue that their licences do not cover the pharmacy during the "grace period".

Some pharmacists also take advantage of this grace period and either absent themselves from work or they become habitual latecomers. This is unprofessional.

Since these pharmacies do not pay anything to the Pharmacy Council in the grace period, one wonders how the Council is able to manage its affairs with this slow inflow of funds.

It is my humble suggestion therefore, that all Pharmacists supervising pharmacies should be made to declare their intention before December 31 as to whether they would continue supervising those premises or would be changing jobs. Consequently, all pharmacies without supervising pharmacists should be closed down in January, and no grace period should be allowed since this grace has become a legally approved period for lawless pharmacy operations which only favours the non-pharmacist.

The Council should also engage community agents who would be mandated to check on licence of premises to facilitate the work of the Council.

FRANCIS AKAKPO
ACCRA

WHAT CONSUMERS WANT TO KNOW ABOUT DRUGS

Basically what can be termed as a drug. Is it a duty to the Pharmacy Council to classify and quantify drugs. Drugs deal with health, can anybody apart from the Pharmacist sell drugs or own a drug store. What is the differene between a chemist and a pharmacist, what is their area of operation. Is ther a law prosecuting fake chemists. If someone who is not a pharmist wants to open a drug store what are the requirements. In a case where wrong drug are given; an the consumer sue the pharmacist? What a doctor prescribes a drug for a patient does the Pharmacist try to get some information as well before the drug is given to the patient. Should a Pharmacist find out that a prescribed drug is not suitable for an ailment can he change it or what does he do in such a case. How far does this go; someone saying he is allergic to a drug. Is it a possibility. Why must someone be allergic to a drug. How would someone know whether he is allergic to a drug. If someone is allergic to a drug and it's administered to him can it harm him. Is it possible that all drugs have side effects. It is alleged that taking over dose cn kill how true is that. Does it apply to all drug. To what extent can a drug be harmful to the user. Is it possible to try three different drugs at the same time for an ailment. Do all drug give instant relief. Drugs are not supposed to injure us but sometimes people get drug related diseases, how is that? Can orthodox. Importaion of drugs into the country; is the board in control of it. Herbal remedies are on the increase is there an association for them which is under your jurisdiction. Is ther any collaboration between the pharmacy board and the herbalist. Do you have programmes educuating herbalist standars packaging, clear labelling, indications etc. Is it possible for a drug to go bad before the expiring date. Alcohol and smoking does it affect drugs efficacy. Normally we take in pain relief antacids laxatives etc. How safe are these. What are some of the cost effective drugs for these minor cases. Self medication is it advisable. In terms of curing which of the two is effective, western medicines or herbal medicines. How does one identify an original or sub-standard drug. Is there a policy ensuring the evaluation of drugs. Can one talk about quality when the issue of locally manufactured drug come up. Injetions and anaesthetics are they drug. What are some of the drug forms. Some drug are termed illegal why is it so however some are being used as soothes. What explanation can be given to this.

Nana Akosua Ofori-Atta
Freelance Writer

EDITOR'S NOTE

This letter has been pulished unedited. Expect response in the next issue of the Journal.

**ARE YOU A PAID UP
MEMBER? PAY YOUR
RETENTION FEES TO
SUPPORT THE
SOCIETY.**

INTERNET BLUES

THE GANG IS GREEN

During my first six months as a student nurse, we didn't know very much about anything yet. The senior students would amuse themselves by sending us nurses on all sorts of fool errands. On one such occasion, my friend and I were sent to get fallopian tubes from the men's medical ward. Needless to say everybody had a good laugh.

LIZ

THE SELF-DIAGNOSIS OF SANITY

One busy evening as an RN on a psych ward, one of our patients came rushing up to the nursing station. He grabbed the counter with both hands and loudly declared, "I'M CURED! I am ready to go home!" One of doctors iquired, "What makes you feel you are ready to go home?" The patient looked straight at him and said, "I'm no longer mentally deaf! I'm hearing voices!"

MARY

BIRTH CONTROL: SOUTH OF THE MASON DIXON LINE

Being a pharmacist, we hear intimate details of our patients' lives on a daily basis. One evening, a lady approached the counter and said she needed help with choosing a birth control method. The pharmacist asked her what method she had used in the past and she said, "Oh, we've been using the rhythm section for the past year, but I'm afraid it won't work." We kept our composure until she left, but we could just visualise the couple next to a band (the rhythm section).

Anonymous

A TRUE STAMP OF APPROVAL

Years ago, a young woman was hurrying to get ready for her OBI/Gyn appointment. She made a habit of always using the restroom before the visit to empty her bladder. When she was in the bathroom stall, she realized that there was no toilet paper. So, since she was in a hurry, she grabbed in her purse for a tissue. She used the tissue, and then left for her appointment. She went for her appointment with the doctor and was placed in the stirrups for the exam. The physician came into the exam room and after a brief exam, smiled, and said, "Gee, you gave stamps too!!!"

This was during the time that merchants gave out "green stamps" with purchases. The stamps had evidently been stuck inside the tissue used in the bathroom.

CT



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