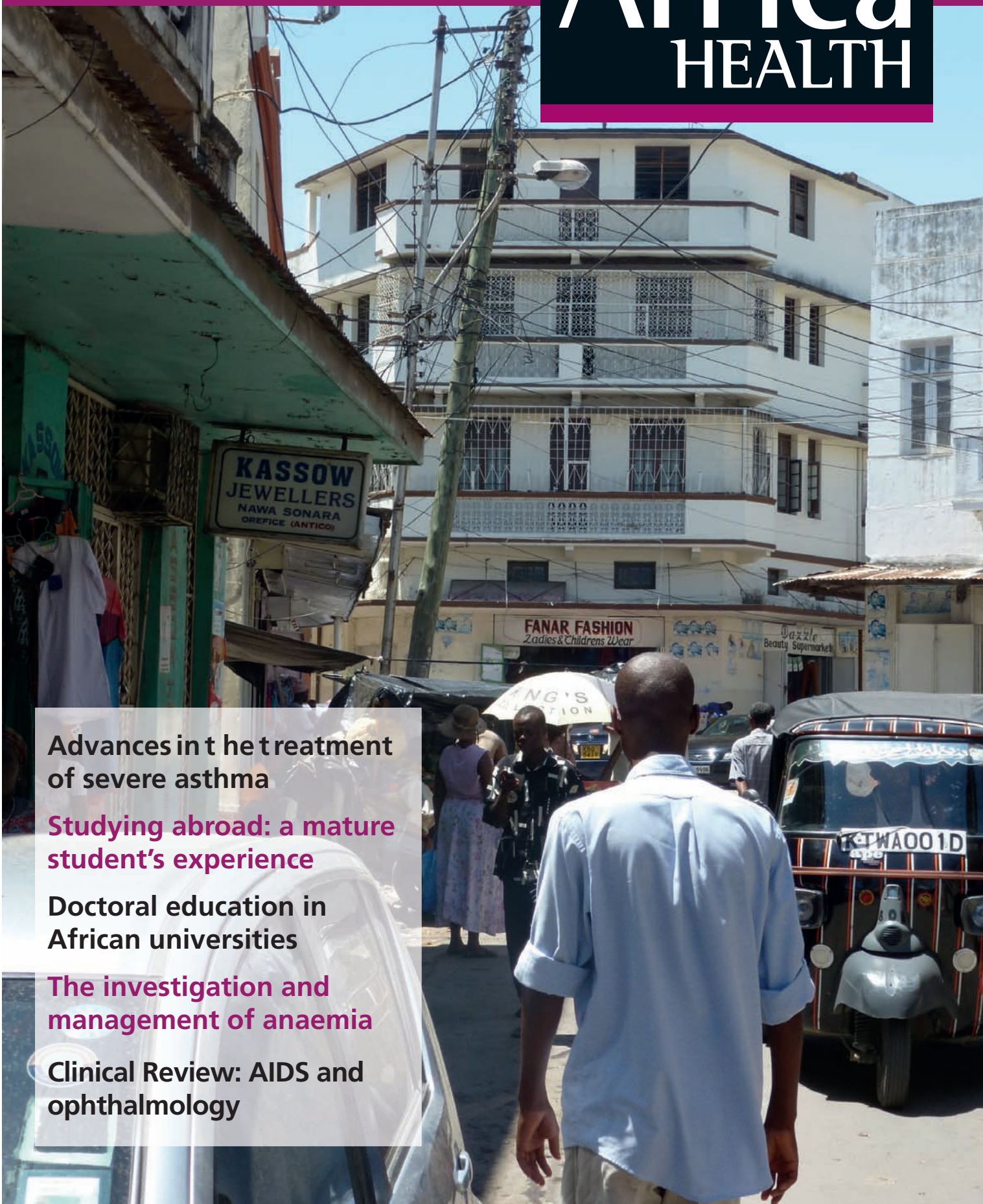
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Africa HEALTH



Advances in t he t reatment of severe asthma

Studying abroad: a mature student's experience

Doctoral education in African universities

The investigation and management of anaemia

Clinical Review: AIDS and ophthalmology

Contents

02 News Update: Senate passes National Health Bill again amid controversies; Budget decrease for health

03 Antibiotic disaster looming
Prof Shima Gyoh

05 The rhetoric of 'bringing primary healthcare under one roof' leaves a fundamental issue unattended
Dr Tarry Asoka

08 Coffee: more than a social drink?
Prof Shima Gyoh

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A Bill still with no receipt

'The Health Bill is passed,' screamed the headline in the newspaper I was reading as we taxi'd out of MMA1 en route to Accra. 'Wow' I exclaimed, thinking that the impossible was maybe possible after all. Upon arrival in Accra I called friends back in Lagos. What is this? When? How? Why no fanfare? Why no response from those who were opposing it before? All seems silent? What is happening? Has the original Bill been amended?

Sadly it seems that it was the proponents of the Bill who were having another day in the media. The Senate had passed the Bill several years back only for it not to be signed into law by Mr President as the various factions bickered over its content. Has it been amended before being passed again by the Senate? No-one seems to know!

So while Nigeria desperately needs the (final) Health Bill to be signed into law, we remain extremely unsure if this is a real or a false dawn in the saga. We await, ever hopeful but inured to disappointment.

Meanwhile as we went to press we were receiving reports that the Federal Government has adopted commitments towards the provision of Universal Health Coverage for all citizenry. 'Wow' we said again. But then pondered on the huge challenges in achieving such. 'Was additional money mentioned?' we asked, but our investigators have still not reverted with any concrete evidence.

Universal Health Coverage seems to be the new Primary Health Care. But of course, as Tarry Asoka once again points out in this issue, it is very difficult to deliver any kind of joined-up health system when the current structure has so many horizontal delivery agents (States) alongside so many vertical programmes (malaria, primary care, etc). The whole structure needs reexamination.

Bryan Pearson

News Update

Senate passes National Health Bill again amid controversies

It is no longer news that the Nigerian Senate, the upper legislative arm of the National Assembly has passed the National Health Bill again after the President failed to sign the previous one that was presented to him in 2011. Addressing journalists soon after the bill was passed, Senator Ifeanyi Okowa – Chairman of the Senate Committee on Health – expressed confidence that it would not only guarantee improvement in the healthcare sector, but would also regulate healthcare practice, promote professionalism, and eliminate quackery.

Among the stakeholders who were bickering over the bill a couple of months ago, only the Nigeria Medical Association in a press statement by its President, Dr Osahon Enabulele has observed that 'we received with a sense of satisfaction and fulfilment the news of the passage of the National Health Bill by the Senate of the Federal Republic of Nigeria.' The opponents, in particular Health Professional Associations allied to Medicine, have been eerily silent more than 2 weeks after the bill's passage was announced. However, in a telephone conversation with one of their leaders, Dr G C Okara remarked that there are three persistent issues that are yet to be resolved.

First, they still want an amendment to Section 1 that deals with the 'Establishment of the National Health System', by inserting the clause 'without prejudice to the various relevant professional statutes.' As they have repeatedly demanded, they insist that this section contravenes already existing laws guarding standards and regulation of professional practice in the country. The two others have to do with inclusion of health professional associations and a representative of medical laboratory profession as members of the National Council on Health and the Research Ethics Committee respectively. There is also information about the threat of a possible legal challenge by the Catholic Church that is very unhappy with the retention of Section 51: Prohibition of Reproductive, therapeutic Cloning of Human Kind.

Despite these lingering matters and given that the original intention of a National Health Bill is to correct the constitutional omission or commission for not explicitly assigning roles and responsibilities for the three tiers of government in relation to healthcare; this document is still considered to be seriously flawed as to render it ineffective even if it is signed into law. As the bill will now have to undergo a similar legislative process in the Federal House of Representative before a somewhat harmonised bill can be presented to the President for his signature; there is yet another chance to correct this fundamental anomaly if the high hopes for the bill are to be realised.

Dr Tarry Asoka

Budget decrease for health

The false economy of starving public sector health services of funds while watching increasing numbers of patients taking dollars abroad to buy themselves treatment that they do not feel confident of obtaining at home, is set to continue following the latest budget allocation announcement.

Astonishingly health has been allocated N262.74 billion a 6.7% decrease against the 2013 allocation. With 82.68% earmarked for recurrent expenditure (salaries etc) the amount for developing new services is just N46.3 billion.

Further details of the Appropriation Bill indicate the Health Ministry is to spend the sum of N9.109 billion for the construction/provision of hospitals/health centres. The sum of N115 million is to be spent on HIV/AIDS control, N213.321 million on cancer control, and N85.653 million on malaria control.

The State House Headquarters plans to purchase an embalming machine at the cost of N1.65 m and a hydraulic post-mortem table at N4 m. Speculation is rife on what the justification is for such extravagant spending within a single clinic.

The ministry's project on HIV/AIDS control comprises expansion of access to treatment; care and support to people living with HIV; establishment, assessment and upgrading of additional 100 sites nationwide; and HIV test kits.

Highlights of projects and programmes lined up in 2014 include operational costs for distribution of long-lasting insecticide treated bed nets and integrated vector management of malaria.

The cancer control comprises purchase of mobile cancer screening vans and support for radiotherapy, nuclear medicine activities of tertiary hospitals, baseline data survey for cancer burden and ionising, and radiation activities in federal health institutions.

The proposed Bill reveals introduction of new projects by the ministry. These include implementation of e-health policy (N80.708 million); procurement of narcotic drugs (N32.6 million); diseases eradication and control programmes (N88.224 million) support for nursing services and midwifery scheme (N246.869 million); national demographic and health survey (N55.264 million); port health service (N50.356 million), to mention a few.

For a country that gave its name (The Abuja Declaration) to the Africa-wide initiative towards each country committing 15% of its overall budget to health, this all makes disappointing reading. Last year Nigeria's health allocation equated to 5.6%. In the same year Ghana committed 12.5%.

Antibiotic disaster looming

The misuse of antibiotics is rendering them ineffective.- Prof Shima Gyoh reports

Suppose one morning, we woke up to find that all antibiotics had disappeared from the face of the earth! What would it be like? Catastrophic! Although there was life before the invention of antibiotics, the medical world has so much adjusted its lifestyle to their use that their sudden disappearance would be like the end of the world. Every operation, no matter how minor, would pose a grievous threat to survival. Organ transplantation would have to stop. Conditions of immune suppression, such as AIDS, would become uncontrollable. Most infections would become fatal or produce the disabling complications that we have almost forgotten about. Life expectancy would be greatly shortened particularly in poorly developed countries.

Ghastly as it sounds, the situation is coming upon the world, but in a gradual form through the misuse of antibiotics that is rendering them ineffective. Misuse causes the emergence of 'superbugs' resistant to practically all the antibiotics in use.

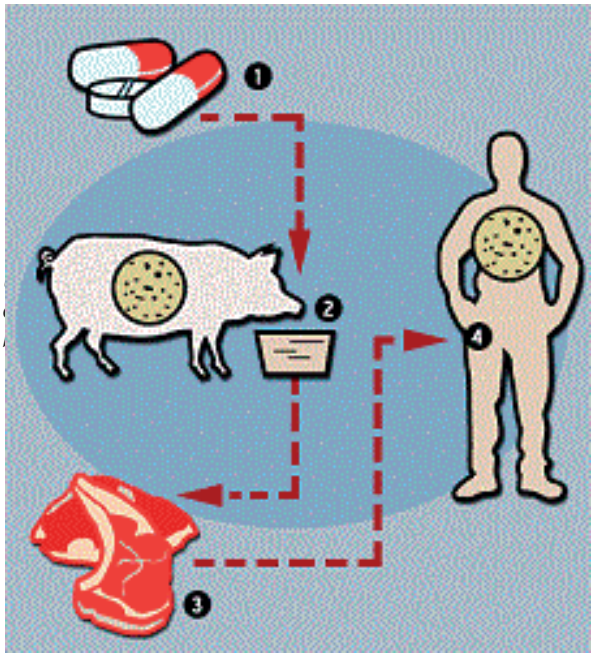
Because of their tremendous importance in human health, one would expect that antibiotic use would be confined to medicine, yet the greater quantities produced are used in agriculture. It is estimated that about 80% of the antibiotics sold in the USA are used to feed livestock on farms.[1] While this is an important and an unfortunate contributor to the development of resistant strains, the main culprit is misuse in medicine. Over prescription, inappropriate doses, and use where they are unnecessary is widespread. They are supposed to be controlled drugs, but in the third world they are sold over the counter without prescription, hawked in market places and around the streets of villages.

Traditionally, doctors regarded the fight against infective agents as a war. Prescriptions were on sound principles. Antibiotics in the first line of defence were the least expensive with their spectra of activity effective against organisms known to be responsible for most infections in the environment. The second line were prescribed only when indicated by culture and sensitivity tests. They were more toxic and expensive. With good laboratory support, one could observe the golden rule of using drugs with a narrow spectrum tailored to the infecting organisms and avoid blind use of broad-spectrum drugs that eliminate useful symbionts, promoting the emergence of resistant strains. Third-line drugs were the most recently discovered antibiotics, the most expensive, and potentially most toxic. They were held back for use only when the first- and second-line defence failed.

Unfortunately, this disciplined approach is now alien to most doctors in both private and public health. I am horrified to see consultants in teaching hospitals prescribing the most powerful available antibiotic for both treatment and prophylaxis. Future doctors are being taught haphazard prescription.

I admit that the deficiencies in our environment make it difficult to adopt a strict discipline in prescription. First, the variety of drugs available to us at any one moment is incomplete, unreliable, and intermittent, so we rarely have the privilege of choice. Second, prompt and reliable laboratory services are exceptional; we do not often dare to wait when human life is at stake. With poor diagnostic back up, many doctors do not have sufficient confidence to do what looks like taking chances. Nevertheless many of the actions have no defence, like showering patients with many antibiotics, making a beeline for broad spectrum without considering where the infection originated, sometimes mixing bacteriostatic with bactericidal ones, continuing to administer specific drugs in the absence of evidence of efficacy, frequent inappropriate prophylactic use, and substituting prophylaxis for strict hygienic prevention. Many institutions have resorted to antiseptic instead of aseptic surgery.

The misuse is not confined to African countries. D F Maron says that multiple studies have shown that half of all antibiotics prescribed in the US are not needed or are inappropriate.[2] The situation in the UK and other



Prof Shima Gyoh, Co-Editor, Africa Health (Nigeria)

developed countries is not much different. The result is that superbugs are emerging all over the world. Examples are Methicillin Resistant *Staphylococcus Aureus* (MRSA), multiple drug-resistant tuberculosis and the HO41 strain of *gonococcus* said to be more infectious and more lethal than the AIDS virus. In Europe, superbugs are identified to be resistant to the last resort group of antibiotics known as carbapenems. The best know is a species of *Klebsiella pneumoniae* that originated from New Delhi. It has a transmissible genetic element encoding multiple resistance genes. Apart from lateral transmission of drug resistance, most bacteria reproduce every 20 minutes and several generations can arise within a short time, providing a lot of opportunity for dangerous genetic mutations to occur. An editorial in *Nature* magazine said, 'we are engaged in arms race with pathogenic bacteria – and we are losing.'[3]

Every year, more than 2 million people develop multiple drug-resistant infections in the US, and at least 23 000 die.[3] There are no statistics in African countries, but the situation is most likely much worse.

There have been several warnings, often deliberately couched in alarming language to shock the world into taking timely action to avoid the looming post-antibiotic era. Britain, not famous for extravagant expressions described the danger as 'catastrophic.'[4]

Only international coordination can assuage the condition. While the developed world has advanced scientific methods to utilise, African countries can do a lot, particularly in advocacy, education, and prevention by adopting a culture of hand washing, aseptic methods and scientific prescribing attitude.

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The rhetoric of 'bringing primary healthcare under one roof' leaves a fundamental issue unattended

Dr Tarry Asoka observes how difficult it is to deliver integrated health services, when the defining lines between agencies leaves responsibilities unclear.

Among several factors, organisational confusion among various actors has been noted as the major obstacle that has prevented the Nigerian health system from performing optimally. It is an acceptable notion that the Federal Government of Nigeria, the 36 State Governments, and the 774 Local Governments Councils (LGCs), have collective responsibility for the provision of healthcare in the country. Under this premise, the Federal Government through the Federal Ministry of Health (FMoH), sets overall policy goals, co-ordinates activities, ensures quality training, and implements health sector programmes. But lack of coordination of policies among the three tiers of government and parallel implementation systems result in duplication of service delivery interventions and overlap even within each tier.

Despite rightly holding onto the oversight role of the national health system, the Federal Government has attempted to also retain considerable control of programme implementation through its agencies. The National Primary Health Care Development Agency (NPHCDA) for instance, was set up primarily to ensure the institutionalisation and sustainability of primary healthcare (PHC). It provides technical direction to States and Local Government Areas (LGAs) in the implementation, supervision, and monitoring of PHC. But the Agency has no formal or institutionalised relationship with other departments or agencies of the FMoH, such as malaria control, maternal and child health that also provide significant technical support to the States and LGAs. Therefore, although these federal institutions are working towards the same goal of improving the health and well-being of Nigerians, collaboration and the co-ordination of activities amongst them remain poor.

A similar situation exists at the State level, particularly in relation to oversight of PHC delivery. With minor variations among States, PHC implementation is supported, supervised, monitored, and evaluated by the State Government through the State Ministry of Health (SMoH), State Ministry for Local Government (SMfLG) and the Local Government Service Commission (LGSC). But despite the interrelationships of their functions, linkages among these key players in the management and delivery of PHC are neither sufficiently firm nor clearly defined. There is also no setting for generating the synergy required for effective healthcare delivery at this level. Herein the call for 'bring—ing PHC under one roof' that according to advocacy documents aims to establish 'a single management body with adequate capacity that has control over services and resources (personnel, funding, and material).' And at the last count, at least 14 States have passed laws (while 8 others are in the process of passing laws) - setting up a State PHC board or agency to structurally integrate departments and agencies from the SMoH, LGA Health Departments, and elsewhere into this new entity.

No doubt such a policy on the surface appears to be the ultimate solution to the fragmented PHC service delivery at the community level; but the situation on the ground presents a different reality. There is some evidence to indicate that even with the existence of a State Primary Health Care Board or Agency, the establishment of an integrated PHC delivery system may still face technical, organisational and perhaps other legal challenges. Fundamental to this is the issue whereby the Federal Government, the 36 State Governments and the 774 Local Government Councils derive their respective powers and considerable autonomy from the Constitution of the Federal Republic of Nigeria. Along these lines, federal revenue is shared between the three tiers of government on agreed proportion, with no specific mandate on how their individual allocations would be spent. As these funds are held by separate governments, control over these resources rather than the willingness or lack of capacity to collaborate to deliver PHC services at the community level deters the institution of a system for integrated PHC service delivery at the State level.

It has been observed that for nearly all PHC interventions, the near absence of funds dedicated to finance key recurrent activities has been the major reason why coverage for such services are so poor. Take routine immunisation for example, these would include: the cost of distribution of vaccines from the LGAs cold stores to health facilities; transportation cost and feeding allowance for health workers to conduct outreach services; cost of transportation for supportive supervision, in particular by LGA health teams to health facilities; fuelling of generators to power freezers used in producing ice packs and vaccines storage at LGA cold stores; and demand creation activities, mainly cost

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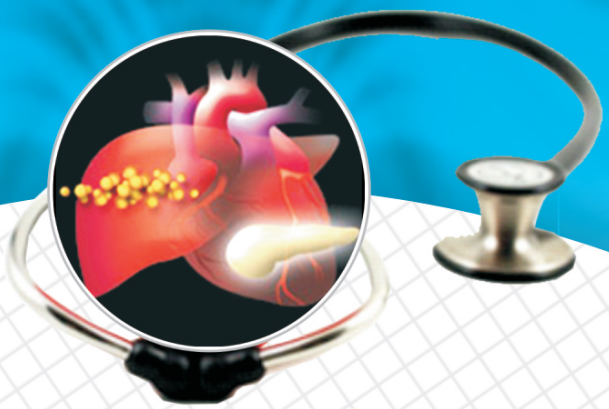
of social mobilisation, and in particular the payment of village and town announcers. Development Partners working in the States have been providing technical and financial support in the areas of planning and budgeting, training of staff on the different aspects of immunisation, strengthening of the health management information system, strengthening of the cold chain system, especially provision and repair of solar refrigerators, as well as demand creation. While the FMoH through the National PHC Development Agency provides all the bundled routine immunisation vaccines and waste management materials. Nonetheless, the impact of this level of support from the Development Partners and the Federal Government on immunisation coverage is undermined by the absolute lack of funds to ensure that both vaccines and health workers are available at the point of service delivery at the health facility or outreach locations. The situation is not different whether it is the distribution of mosquito nets, health education for breast feeding or carrying out ante-natal services.

And even where many States claim to be appropriating more than 10% of their State Annual Budgets to healthcare; with less than 60% budget performance in most instances, release of allocated funds has been a major challenge. Consequently, there are huge gaps in the funding required to finance essential health services with dire consequences for health outcomes for their citizens. The practice in some of the States, again using routine immunisation as an example – is to set aside a little proportion of the funding for Immunisation plus Days (IPDs) for polio to meet these obligatory expenses. But these are inadequate and contingent upon whether an IPD takes place or not. It also means that as some allocation to the IPDs is deducted for this purpose, the funds earmarked for the IPDs have also been compromised.

Therefore, it is reasonable to conclude that the fundamental issue to tackle up and above the rhetoric of 'bringing PHC under one roof' is the problem of funding recurrent costs of PHC activities. As this goes beyond setting up State PHC boards or agencies, those advocating for this policy must first address this problem. Otherwise, these organisations may just end up as yet other government establishments unable to carry out their mandates. This is already happening in States where this reform is most advanced such as Jigawa State – as the absence of a 'pooled fund' between the State Government and Local Government Councils has perpetuated the difficulties resulting from the lack of a PHC service delivery fund to cover recurrent costs. On the other hand, this policy is more likely to succeed in Zamfara State where such a fund predates the State PHC Board.



Children in Nigeria queuing for polio vaccine. Costs of cold chain transportation and generators to power freezers may be available but lack of funds at the point of service delivery is sometimes lacking.



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Coffee: more than a social drink?

Prof Shima Gyoh delivers a stimulating discussion!

I love coffee. Half the pleasure starts from perceiving the aroma of brewing freshly ground, gorgeously roasted coffee beans, but these days as I no longer live in a megatown, I have hard times looking for quality roast or grounds hermetically sealed to preserve its freshness. I have two hand-operated grinders, three strategically located electric percolators, and two hot water brewers—the type operated by a plunger. Now, if this is not obsession, I don't know what is. Mind you, I have not come across any exotic instant coffee preparation, whether gold label or 'De Luxe,' that has the slightest resemblance to the real stuff in aroma or taste, and I do not touch them!

The drinking started during my student days in the 20th century and has not been interrupted. I heard that it kept people awake because of its stimulant properties. I guess my system soon became refractory to that – coffee can be a wonderful nightcap for me. I have read that it also aids memory. Why, then, has my memory got steadily worse? Maybe my system has become refractive to that too.

I recently came across an impressive publication about aids to memory. A neurothnologist, Dr Greraldine Wright of Newcastle University claimed in a paper[1] that plants of the *Coffea* and citrus species spice their nectar with caffeine. Bees that taste it have their memories improved and can more easily find their way back. The smart plants have thereby achieved brand loyalty from the insects that will seek them out and in the process pollinate their flowers! Dr Wright supplied the technical explanation, that caffeine potentiates the responses of mushroom body neurons involved in olfactory learning and memory by acting as an adenosine receptor antagonist.[1] Wow! By this clever chemistry, the *Coffea* specie has also consigned the environmentally destructive *Homo sapiens* to use his cunning for the plant's own survival!

A paper[2] in the *New Scientist* claimed that research at the University of California confirmed that coffee enhances long-term memory by improving the process of consolidation. The effect occurs whether the coffee is taken before or soon after reading, but only during the period of consolidation. It is no good chewing caffeine toffees in the examination hall several hours afterwards! The findings stress getting the correct quantity ingested, as doses over 300 milligrams gave the same effect as placebos.

Medical literature is awash with numerous benefits of caffeine. In moderate doses, it protects against cardiac arrhythmias and strokes, including heart failure. It also protects against some metabolic and liver disease and reduces the risk of hepatocellular cancer.

Caffeine is now claimed to protect against developing type 2 diabetes mellitus![3] The findings of a meta analysis have been described as robust, involving well over a million participants, relating the protective effects to the number of cups of coffee consumed per day over a period. 'Most coffee is likely to be filtered coffee, and the results from studies conducted in various populations, including the US, European, and Asian, were similar, indicating consistency, despite potentially different preparation and processing methods.' The effect was the same with both caffeinated and decaffeinated drinks, giving rise to the postulation that non-caffeine components such as chlorogenic acid and many other major components of coffee might be important. The American Diabetes Association concluded: 'Coffee consumption was inversely associated with the risk of type 2 diabetes in a dose-response manner. Both caffeinated and decaffeinated coffee was associated with reduced diabetes risk.'[3]

The Institute for Scientific Information on Coffee (ISIC) has also updated its records to reflect similar conclusions. Nevertheless, there are dissenting opinions. James Lane, a professor of behavioural medicine disagrees: 'The truth is, they can't show that drinking coffee reduces the risk for developing diabetes; all they can show is that there's a correlation.'

He may well be right, as statistics can be used to make surprising, sometimes suspect statements. Wherever the truth lies, the findings should not be dismissed outright. At worst, coffee can only be one of many dietary and lifestyle factors that can contribute to diabetes prevention.

Heavy coffee drinking has, however, been associated with an increased risk of all-cause mortality![4] New studies suggest that taking more than four cups of coffee per day 'does more than increase the risk of the jitters.' The size of cup is defined as 8 ounces. This confused me – the most advanced scientific nation on earth – the USA still talks in miles and ounces! I feel it is not unreasonable to assume the size extends from the small traditional 'coffee cup' to the large mug of about 300 millilitres. There cannot be many people consuming 600 ounces of coffee per week condemned in the article, whether by weight or volume. Moderation is the keyword and most of us do not have cause to worry about the dangers of excessive intake.

In the battle for supremacy between two of the socially accepted warm drinks, coffee might give tea a good run for its money. Even the decaffeinated stuff we used to derisively call 'mud' has now been shown to be beneficial.

Prof Shima Gyoh, Co-Editor, Africa Health (Nigeria)

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