January 2014 Volume 36 Number 2



NIGERIA

Acute stroke and transient ischaemic attack

Improving the quality of lab equipment & diagnostics

Evidence-based practice for indwelling urinary catheters

The unconscious patient

World Malaria Report 2013: surveillance & monitoring



Contents

- 02 How not to leapfrog a health system Dr Tarry Asoka
- 05 Clinical governance in Nigerian hospitals: Nigerian Medical Association leads *Prof Joseph Ana*
- 07 Strikes in the health services of Nigeria *Prof Shima Gyoh*

The Nigeria Africa Health pages are coordinated by the editorial board members listed below. Suggestions for articles, news stories, or letters are welcome and should be submitted directly to them. If you wish to comment on the core journal, communicate to the UK address listed on the main contents page. Distribution is free, and by hand. If you wish to be sure of receiving a copy for either yourself or your institution, please subscribe. See page 3 of the main journal for details for Naira subscriptions.

Subscribed copies will be personally addressed,

Do you have an opinion to air? Write to the

Editors

and posted.

Dr Tarry Asoka

Medical Doctor and Health Management Consultant. Based in Port Harcourt Email: tarry@carenet.info

Editors at: ahnigeria@fsg.co.uk

Prof Shima Gyoh

Dept of Surgery, Benue State University, Makurdi, and ex Chair of the Medical and Dental Council of Nigeria (MDCN).
Email: shimagyoh@gmail.com

Dr Chikwe Ihekweazu

Consultant Medical Epidemiologist who also blogs on Nigerian health issues at www.nigeriahealthwatch.com Email: chikwe@nigeriahealthwatch.com

Felix Obi

Physiotherapist and Health Policy and Management Consultant who lives and works in Abuja Email: halal3k@yahoo.com

New year, new hope, same problem!

It is a new year and it has to bring new hopes for the health sector in Nigeria. Unlike in other sectors that have seen significant policy changes, many of the electricity production and distribution companies have been privatised – the railway infrastructure is remerging and the agriculture sector is getting a new lease of life, but there has been little to celebrate in the health sector last year. The health bill is still being tossed between the parliament and the president, the health professions continue to embark on strikes, primarily for better salaries and positions, and the Nigerian patient barely features in any of the the discussions. Flights are still full going out of Nigeria to India, Dubai, and South Africa with patients that can afford to pay for the healthcare available in these countries, while the rest of the population is left to their faith. The public health indices have remained at rock bottom and outbreaks of old disease like cholera continue to take the lives of Nigerians.

While government interventions stagnate, for the first time in many years, there appears to be significant private sector funds available for investment in the sector. As Dr Tarry Asoka illustrates in his piece in this edition of your *Africa Health*, the sector is in dire need of the innovation and creativity that have overcome challenges in other aspects of life in Nigeria. There is definitely a market, albeit a slightly more complex one than is available in other sectors. There is also an increasing awareness of the importance of good health as evidenced on the streets of Nigerian cities, as they are increasingly occupied by joggers in the early hours.

Nigerians really deserve better than they get at the moment from their health sector. With the elections approaching, they also have an opportunity of putting health squarely on the political agenda. We look forward to an enlightened discussion between Nigerians and the politicians seeking their votes on what their achievements have been, and what their aspirations are in the sector. It is only by holding our politicians accountable for their promises that a democracy can deliver results for the people.

Dr Chikwe Ihekweazu For the Editorial Team

January 2014 Africa Health Nigeria 1



How not to leapfrog a health system

Dr Tarry Asoka attended a seminar at the end of 2013 which was intended to provide solutions to Nigeria's health service problems. It was an eye-opening experience. Read on

The World Economic Forum (WEF) has become the latest player to join the myriads of actors in an already crowded bazaar of transforming the health system in Nigeria. The Forum claims its mandate on an ongoing work with engaging emerging economies on the issue of health system sustainability, following one that it had started with five developed countries.

Its basic assumption is that emerging economies enjoy a greater degree of freedom to design efficient and cost-effective health systems – since they are generally less burdened by the legacies of the past (such as less need for retro-fitting) as there has not been much sunk costs in buildings and equipment that may engender resistance to change from strong vested interests. Moreover, it is expected that emerging economies can leverage technological advances and learn from the mistakes of developed countries. Nonetheless, the Forum recognised that seizing transformational opportunities requires innovative, well-coordinated, and implementable set of actions that can only be accomplished through expertise, support, and collaboration of various stakeholders. In this instance, the WEF has selected Nigeria and Indonesia as the two emerging economies it intends to work with to transform their health systems by 'leapfrogging' the pitfalls currently being encountered by advanced economies.

In translating these ideas, the Forum adopted a project-approach and contracted an international consulting firm – the Boston Consulting Group (BCG) to help convene stakeholders in each of these two countries. For Nigeria, following a number of key informant interviews to find out if the leapfrogging concept would receive attention, a Workshop that drew participants from a broad range of stakeholders from the government (Federal and States), private sector (national and international), and the donor community was held in Abuja on the 10th of December, 2013 to generate actionable recommendations. The observations of this author (who was a participant) with respect to the process and outcome of this meeting are quite instructive.

Firstly, based on the expressed expectations of the attendees, there appeared to be great anxiety and suspicion among some participants – especially those from the government and international development agencies – who were openly concerned on how this leapfrogging agenda would disrupt existing policies, plans, and programmes. Secondly, there was a sense that the project managers of BCG were not successful

Dr Tarry Asoka, Co-Editor, Africa Health (Nigeria)

in effectively communicating that leapfrogging the health system in Nigeria would entail changing mind-sets in doing things differently or doing entirely new things. This was demonstrated by the fact that most of the leapfrogging opportunities that emerged from the meeting were more like the same 'reform issues' that stakeholders have been struggling with. Thirdly, some of the leapfrogging examples selected from elsewhere to stimulate creative thinking at this workshop are questionable in terms of their ability to being scaled up for impact and their feasibility within the Nigerian context.

Notwithstanding, given the poor health status of Nigerians consequent upon the unsatisfactory performance of the health system, a fundamental health system change is inevitable. And the health system leapfrogging proposition by the WEF is still valid. Apart from not repeating the mistakes of developed economies, which have also been found to be unsustainable in an emerging economy context, the health system in Nigeria should necessarily leapfrog to overcome the structural constraints and meet the expectations of a growing population in the midst of limited resources. But leapfrogging efforts in Nigeria would tend to follow a much different path from the one that is being rationally designed by the WEF. This is because what is seen as the key challenges of the Nigerian health system by the Forum – fragmentation of governance, financing gap, weak infrastructure, insufficient skilled workforce, lack of medical products and logistics - are all symptoms of much larger problems such as vested interests and a tendency to much maintain the status quo, as well as other restrictive structures within the political economy against which actors are trying to bring about change. Moreover, the institutions in Nigeria – formal rules and regulations, and informal norms and ways of social interaction – have assumed structural features that have created more obstacles for actors to catalyse change.

Therefore irrespective of the sector, leapfrogging opportunities in Nigeria must have the capacity to empower actors to overcome or side-step the structural and institutional impediments inherent in the system. And there are a few examples in Nigeria, but two of these should suffice for now. The first example is 'sachet water', popularly known as 'pure water' that is commercially produced and marketed by myriads of small-scale producers across the country. Its value attainment is demonstrated by making available better quality drinking water to the whole population guaranteed by the National Agency for Food and Drug Administration and Control (NAFDAC). It has been said that this approach to water and sanitation has led

to the reduction of diarrhoeal diseases more than the traditional method of digging wells and bore holes that have been used by governments and donors in the last two decades.

The second example is the conversion of the population at the bottom of the income pyramid into effective consumers by producers of basic goods and services in the country. Manufacturers of groceries to mobile telephone service operators have developed the capacity to



Transformational change of health services requires multi-faceted understanding and diplomacy

provide the same goods and services enjoyed by the upper economic classes to the lower income groups by offering them in small quantities at the lowest currency. Other than reaching virtually everyone with these essential products and services, these large producers, usually multi-national companies, are compelled to deliver the same value to poor people using a market-based approach. It is not unlikely that to be successful in this same difficult environment, leapfrogging opportunities in the health sector in Nigeria would have to adopt or adapt these and related approaches to significantly make changes within the health system or bring about the much needed transformational change of the entire system.

In the final analysis, no matter the leapfrogging opportunities that are implemented, the health system is about people – citizens, consumers, clients, providers, contributors, and incidental beneficiaries. And as depicted in Figure 1, it is this 'complex adaptive system' of *relationships* among participants that derive *value* from such *interactions*. It is therefore important to note that the health system requires a 'caring culture' that brings the hearts and minds of all the people involved to create and sustain appropriate values that nurture healthcare. Even with the technological advantage of the 21st century, technical knowledge, professional expertise, and skills, though necessary, are not enough to establish such a viewpoint.



Figure 1 A complex adaptive system of relationships

January 2014 Africa Health Nigeria 3

Introducing...



Aziagio Range of Azithromycin (Suspension & tablets)



Multivitamins & Amino Acid (Granules & Liquid)

NAFDAC NO. A4-6249

NAFDAC NO. A4-6545

AGISERT MEA

MOMEY & LERON
PLANOUR

Anticontic Lozongos

Antiseptic Lozenges





Marketed by:

Phillips Pharmaceuticals (Nigeria) Limited

Plot 122-132, Apapa-Oshodi Expressway, Afprint Industrial Estate, Iyana-Isolo, Lagos. Tel: +234-8036761764, +234-8056292409



Clinical governance in Nigerian hospitals: Nigerian Medical Association leads

Joseph Ana, ex-Commissioner of Health from Cross River State, describes a significant step forward in the search for better quality health delivery in Nigeria

A year after the formal inauguration of the Nigerian Medical Association (NMA) Clinical Governance and Research Committee, the meeting of the Association in December 2013 upgraded the constitutional status of the committee to a Standing Committee. This historic move is important as it institutionalises a doctor-led clinical governance, a quality and safety initiative for Nigeria, and ensures the longevity and sustainability of the achievements of the committee. So far we have achieved:

- development of NMA Strategic Policy on Clinical Governance in Nigeria, including a comprehensive curriculum;
- progress on an implementation strategy and the first Work Plan, including the induction of zonal clinical governance leads;
- development of Quality Frameworks for common disease conditions and surgical operations;
- increasing awareness of the home-grown model of clinical governance amongst NMA members.

The philosophy underlying the clinical governance model in Nigeria is that, 'No matter how prestigious the buildings in hospitals and health centres, and no matter how sophisticated the equipment, (both are the preoccupation of politicians), the critical factors in preventing and reducing mortality and morbidity are the attitude and behaviour of the health workers and their knowledge, skills, and expertise. It is human beings that use machines to care for patients.

The home-grown model of clinical governance is defined simply as, 'protecting patients and supporting the practitioners in tandem'. It began as a pilot in Cross River State of Nigeria in 2004, and by 2008 the achievements of the initiative convinced the state government to establish Nigeria's first 'department of clinical governance, servicom, and e-health' in the state Ministry of Health. The model has since been replicated and adopted by the Bauchi State Government, which is on the threshold of establishing an Institute of Clinical Governance in 2014. The achievements of the current Bauchi State government in the health sector are directly linked to the changes that ensued with the adoption of an evidence-based health transformation blue print, and which is anchored on clinical governance. This model

Joseph Ana is Associate Professor at the Faculty of Health Sciences, Cross River University of Technology (CRUTECH); and Chairman of the NMA Clinical Governance and Research Committee. of clinical governance has also been extended to private hospitals, including the Calabar Women and Children Hospital and Lily Hospital, Warri in Delta State.

Clinical governance in Nigeria is a comprehensive quality revival response to the myriad of challenges identified and catalogued in the report of a comprehensive needs assessment/situation analysis of the health sector in Cross River state in 2004. It is a whole system change approach to the failing health system that we see in this part of the world. The depressing findings are similar to what has been reported from any other state and the Federal Capital Territory (FCT) of Nigeria, and indeed from most of the other low-income countries. Some of these troubling findings in Cross River State in 2004 were:

- maternal mortality of up to 2000 per 100 000;
- infant mortality of 120 per 1000 live births;
- under-5 mortality of 245 per 1000;
- HIV/AIDS prevalence of 12%;
- malaria as the greatest cause of death amongst children and pregnant women, and also the commonest cause of hospital visit and admissions;
- poor access to health facilities due to widespread extreme poverty, bad or lack of roads and transportation;
- lack of emergency ambulance service and inadequate skills in basic or advanced life support by health workers;
- lack of the culture to update and maintain skills (CPD/CME);
- inadequate health funding;
- patients report of bad attitude by staff, and so on.

The result was a vicious cycle in a weak health system (dilapidated infrastructure, lack of equipment, human resource shortage, and skills-lack), which in turn accounted for the poor performance of the sector, and which in turn led to low patient patronage of health facilities. When the dissatisfied patients turn up, they do so rather late with their condition, more complicated, and more expensive to treat.

Clinical governance that has been adopted by the NMA recognises that in this part of the world, the twin aspects of 'protecting the patient' and 'supporting the practitioners to deliver quality care' are often addressed separately, which is why the desired result is hardly achieved. The pilot in Cross River State 2004–2008 showed that where both aspects are addressed together (in tandem) there are quick positive yields, such as:

reduction of sero-prevalence of HIV from 12% in

January 2014 Africa Health Nigeria 5



2003 which dropped to 6.1% in 2006;

- routine immunisation coverage rose from 20% in 2004 to over 84% in 2008;
- more pregnant women and children under 5 received ITNs (insecticide-treated nets);
- lifting of the embargo on in-service training;
- mandatory CPD/CME, improved recruitment, and retention of health professionals;
- · massive retraining workshops for all health workers;
- improved welfare and pay for state-employed staff to match that of their federal-employed counterparts (thereby eliminating 'internal brain drain'); etc.

Health funding was increased from 450 million naira in 2004 to 5.8 billion naira in 2008. By 2008, Cross Riverians were beginning to have an accessible, affordable, equitable, and effective health system, even though it is one of the poorest states in Nigeria. In addition, clinical governance started to create an integrated, patient- and community-centred health system in which all health facilities as a minimum had drinking water, adequate waste disposal procedure, regular and sustained power supply (from generators and solar power), and health facilities manned by up-to-date and motivated practitioners.

These positive changes have been replicated in Bauchi state since 2008. The private hospitals have also concurred the achievements in performance, quality, and safe care for their patients. Therefore, it is safe to believe that this approach to clinical governance is transferable to other low-income countries with similar health system challenges.

The NMA does not pretend that its institutionalisation of clinical governance will automatically cure all the ills and difficulties that currently beset the health sector

in Nigeria. But to do nothing, even when it has the evidence of a home-grown initiative that is achieving positive results in both public and private health facilities in different parts of the country, will be tragic and foolish. At a time when the failure of the Federal Government to fulfill most of the agreements that it reached with the Association has forced it to declare doctors' strike action, less that 1 year after its historic declaration that doctors' strikes can only happen as a very last resort, implementation of the clinical governance, quality and safety plan could not have come soon enough.

The implementation of the strategic plan of the Nigerian Medical Association (NMA)'s Clinical Governance and Research initiative for the 36 states and FCT will require buy-in by all stakeholders: governments (federal, state, local government); corporate bodies; donor partners; civil society; groups; and individuals. It will take advantage of the benefits of 'quick yield' principle and 'harvesting low lying fruits' policy, to adopt and implement the plan in a staged fashion, starting with one state per zone and the FCT in 2013, and extending in full scale in the remaining states in 2014. There will be supporting structures for the effective and efficient take-off of the initiative, including establishing Zonal Clinical Governance Support Groups in each of the six geo-political zones and FCT, to be headed by a 'Clinical Governance Lead (ZCGL)'; then every state and the FCT will be led by a 'State Clinical Governance Associate (SCGA)'; and each health facility will have a trained 'Clinical Governance Focal Person (CGFP)'. So far, five Zonal Clinical Governance Leads have been appointed and inducted. Their handwork will be felt from early 2014.



6 Africa Health Nigeria January 2014



A doctor-led approach will ensure that other members of the multidisciplinary team take part in the initiative in the facilities. It is also planned that by working with the Medical and Health Regulatory bodies, clinical governance will be added to the curriculum of medical schools and the training schools of other health professionals in Nigeria. The curriculum of clinical governance & research training covers five modules:

- good medical practice and patient centered care;
- research in health practice;
- clinical skills acquisition and update (BLS, ALTS, basic surgery, etc);
- health management and development including finance;
- health information and use.

There are thirty-five subjects between the modules.

The mandate for the NMA Clinical Governance and Research Committee is massive and ambitious, but it is an essential need for Nigeria's health system, and if any health organisation in Nigeria can pull it off, it is the NMA, which, since it was formed in January 12th 1951, first as a branch of the British Medical Association, and later as a fully autonomous entity in 1960, at Independence, has struggled to transform the health system for the benefit of all Nigerians, against all odds, to this day.

The establishment of a standing committee on clinical governance demonstrates that the doctors and dentists in Nigeria are ready to implement a clinically governed health system in Nigeria to tackle its long standing challenges. All that the NMA calls for at this time is the support and assistance of all stake holders

in the health of Nigerians, including government, development partners, corporate bodies, and others, so that the clinical governance initiative will succeed for the benefit of providing quality, safe, and effective health care for patients and the Nigerian public in the shortest possible time.

Further reading

- Sally G, Donaldson LJ. Clinical Governance and the drive for quality improvement
- in the new NHS in England. *BMJ* 1998; 317: 61–5. Ana JNE. *Clinical Research Demystified*. Pocket handbook for doctors, nurses and other health practitioners (including a chapter on modern consultation skills) 2009. ISBN: 978-978-49487-3-9. p 72.
- Ana, JNE. Whole system change of failing health systems. (experience of 4-year pilot of Clinical Governance, Quality & Safety in Cross River State, Nigeria. 2009. ISBN: 978-978-49487-0-8. pp 185.
- Cross River State of Nigeria First State Health Plan 2004–2007. Approved by Governor-in-council: November 2004.
- Memorandum of the Honorable Minister of Health on the 2006–2010 strategic plan for strengthening routine immunization. Jalingo, Taraba state, Nigeria, 2006.
- Keynote address by Honorable commissioner for health, Cross River State first Primary Health Care Stakeholders Conference, Calabar; April, 2006.
- Cross River State of Nigeria Second State Health Plan 2007–2011; (MTSS / MTEF).
- Approved by Governor-in-Council: September 2007 Ana JNE, Bassey, J. A Handbook on Clinical Governance, Research and Training. Volume 1; Centre for Clinical Governance, Research and Training, Ministry of Health, Calabar, Nigeria: March 2006.
- Patients Rights and Responsibilities. Centre for Clinical Governance, Research and Training, Ministry of Health, Calabar, Nigeria, March 2006.
- 10. Patient Fee Card (promoting patients right to information). Centre for Clinical Governance, Research and Training, Ministry of Health, Calabar, Nigeria, 2006.
- Essential Drugs Formulary. First Edition, Centre for Clinical Governance, Research and Training, Ministry of Health, Calabar, Nigeria: June 2005.
- 12. Emergency Ambulance mobile phone numbers for the eleven ambulances in the fleet (promoting public right to emergency ambulance service); Centre for Clinical Governance, Research and Training, Ministry of Health, Calabar: April 2005.1 13. Communique: 30th Annual General Meeting of the West African College of
- Physicians (Nigerian Chapter); Maiduguri, Borno state, 20th 23rd July, 2005
- NIGERIA-NEEDS; National Economic Empowerment and Development Strategy. National Planning Commission, Abuja, Nigeria, 2004
- 15. CR-SEEDS; Cross River States Economic Empowerment and Development
- Strategy. State Planning Commission, Calabar, Nigeria: 2005–2007.

 16. Cross River State Government, ECONOMIC BLUEPRINT, Calabar: 2007-2011
- 17. Ana JNE. Compilation of editorials and expert commentaries on Clinical Governance, Training and Health Practice in Nigeria. 2006. BMJ West Africa. ISBN: 1119-2984

Strikes in the health services of Nigeria

The nationwide strike by the NMA was suspended just as we were going to press. But Prof Shima Gyoh's thoughts remain pertinent beyond

Doctors usually explain that they go on strike for two main reasons: poor conditions of work and poor remuneration. How helpful can strikes be in the public health sector?

In principle, striking employees set out to hurt the interest of their employers. Strikes are highly unsuitable in the health sector, particularly in Nigeria for two reasons. Firstly, strikes by health workers neither hurt the interest of the government nor that of the privileged, the groups with the money and the power to satisfy the demands for the strikes. On the contrary, the same health workers will now have more time to attend the privileged in private clinics. In any case, most of the elite go overseas even for a 'medical check up.' Secondly, in normal democracies, the people can sack a government whose action, inaction, or incompetence

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

seriously compromises public interest, such as would result in health workers downing tools. The Nigerian brand of 'democracy' does not allow it. The powerless populace suffer the full blast of the strikes, which go on for months with devastating effects and with only rhetoric sympathy from the government. The topic was covered in a previous publication of this journal (Africa Health 2010; 23: 5.

Over the years, the request of striking health workers for an increase in their salaries and allowances has often been partially or fully met, but hardly ever supported by equivalent fortification of the annual subvention of the institutions. The result is that the increment compromises the capital, maintenance, and service provisions which become smaller and smaller, to the extent that around 80% of the annual subvention is spent on personnel emoluments. The 'conditions at the workplace' have thus been increasingly taking a back



seat over the years.

The Nigeria Medical Association (NMA) in its complaint said the World Health Organization (WHO) recommends that governments should allocate at least 15% of their budgets to the health sector, but the Nigerian governments hardly allocates 5%. I believe that even 15% budget applies to reasonably well-developed health sectors. The Nigerian health sector is yet to be developed.

During the colonial period, Nigerian health services functioned as first aid, the definitive treatment was in England. We did not need visas to go to the UK and treatment was free. We noted in an earlier discussion (*Africa Health* 2013; 35: 8) that the political and social situations changed and we lost these privileges. Nigeria should have therefore developed its health services to become self-sufficient. Much progress has ben made as we now train experts in nearly every field of medical specialty, but we are still far from being self-sufficient.

Seeking health assistance across international boundaries can never cease, nevertheless the present level of exodus of Nigerians for overseas treatment, often termed 'medical tourism' is most unsatisfactory. No one really knows how much 'capital flight' is involved annually, but I have seen estimates of US\$8000 million (the NMA *Premium Times online 02 Sept*) and \$\frac{1}{2}50\$ billion (the organising Committee of the Nigerian Centenary Charity Ball _*Ibid*, 17 Oct 2013). It is also obvious that the beneficiaries are the privileged and the wealthy. Many ordinary people who manage to join this crowd get themselves financially crippled.

The quality of service provided is very varied. In the cases of returning patients we have seen, the records indicate that too many unnecessary expensive investigations are done where the indication is at best controversial. Radical surgical intervention is often carried out where a conservative approach would have been more sober. The radical approach is often favoured

by patients who hope it would bring equally radical and rapid cure, but it is the duty of doctors to honestly provide the information about the advantages and particularly the dangers of all available choices. I admit that this opinion, not based on the results of scientific evaluation of overseas treatment, can be criticised as unfair, as we might not probably be seeing the cured and satisfied patients. Such studies are urgently needed in our health institutions.

The NMA has to seriously consider whether conditions at the work place might be fulfilled if all its demands were satisfied. Tertiary medicine cannot be developed in isolation; it requires basic infrastructure in power and water supply, reliable transport, telecommunications, and a reasonable level of technological development. In other words, the

facilities established for raising the standard of living of the population also enable high-tech medicine to take real roots.

Perhaps the NMA should separate requests for personnel emoluments from the very important demand of the neglected improvement of healthcare infrastructure and the upgrading of tertiary medicine in Nigeria. The suspicion that upgrading of health infrastructure is mere window dressing for the increase in salaries and allowances has gathered credibility as each solution to industrial action over the years has continued to ignore function, making budget expenditure look as if the health institutions exist only to provide salaries for health workers. Worse still, health workers are involved in fighting one another for status and the share of budgetary allocation, while the quality of patient care hardly receives attention. A recent committee inaugurated by the President to tackle this problem was not given the logistics to have even one meeting until the deadline for handing in its report expired.

Upgrading the health sector would be even more expensive than what the Academic Staff Union of Universities is demanding for tertiary education, and detailed needs assessment should be done in the manner it was done for the universities. However, strikes are totally unsuitable in the health sector, as they amount to holding to ransom the helpless poor, and making them suffer and die on an issue for which they already are the main victims and without the power to provide the solution.

We must develop powerful skills of lobbying that take the problem right to the doorstep of those that have the power and the influence to solve it, rather than embark on actions that kill the innocent and the helpless – the very people we are supposed to be fighting for – or are we?



Empty beds: with doctors not working no-one is going to recover with wards like this

8 Africa Health Nigeria January 2014