2011 Volume 47 Number 2

www.ihf-fih.org

International Hospital Federation

World Hospitals and Health Services

The Official Journal of the International Hospital Federation

Please tick your box and pass this on:

- ☐ CEO
- ☐ Medical director
- ☐ Nursing director
- ☐ Head of radiology
- ☐ Head of physiotherapy
- ☐ Senior pharmacist
- ☐ Head of IS/IT
- ☐ Laboratory director
- ☐ Head of purchasing
- ☐ Facility manager

International Hospital Federation

GOVERNMENT OF DUBAI

DUBAI HEALTH AUTHORITY

Under the Directives of

H. H. Sheikh Mohammed Bin Rashid Al Maktoum

Vice President and Prime Minister of the United Arab Emirates and Ruler of Dubai

Under the Patronage of

H.H. Sheikh Hamdan Bin Rashid Al Maktoum

Deputy Ruler of Dubai, Minister of Finance

President of Dubai Health Authority

DUBAI IHF 2011

37th World Hospital Congress

8 - 10 November 2011

DATE

ATLANTIS

The Palm, Dubai

VENUE

"Healthcare in a Changing World Overcoming the Challenges"

THEME

www.ihfdubai.ae

Scientific Programme

Plenary Sessions | Parallel Sessions | Free Papers | B2B Networking

DAY 1: TUESDAY, NOVEMBER 08

10:00 - 11:00 Opening Ceremony
11:00 - 11:30 Coffee
11:30 - 12:30 Plenary Session

Delivery of Effective Care Through Better Global Governance – Carissa Etienne
Assistant Director-General Health Systems and Services, World Health Organization (WHO), Geneva

12:30 - 13:30 Lunch
13:30 - 15:00 **Parallel Sessions**

Hospitals in Pursuit of Excellence
American Hospital Association
Rich Umbdenstock
President and CEO, American Hospital Association
John W. Bluford
President and CEO Truman Medical Centers, AHA Board Chair
Thomas M. Priselac
President and CEO, Cedars-Sinai Health System, AHA Past Board Chair
Maulik S. Joshi
President, Health Research & Educational Trust and Senior Vice President of Research, American Hospital Association

Private Public Partnership: Dubai Health Authority Experience
Dubai Health Authority
Ibtesam Al Bastaki
Director of Business Development and Projects Department, Hospital Services Sector Dubai Health Authority
Saeed Al Shamsi
Director of Technical Affairs, Dubai Health Authority
Laila Al Jassmi
CEO of Health Policy and Strategy sector at Dubai Health Authority
Peyvand Khaleghian
Director of Policy and Strategy, Dubai Health Authority

Innovation: Promoting New Partnerships
French Hospital Federation
Sylvia BENZAKEN
Vice-President of the Medical Board, Research and Teaching Hospital of Nice
Olivier AMEDEE MANESME
Director, Paris Biotech
Jean DEBEAUPUIS
Chief Executive, Research and Teaching Hospital of Grenoble French University
Vincent DIEBOLT
Director, National Center for the Management of Trials on Health Products.

Specific missions of university hospitals
Belgium Hospital Association
Guy Durant
General Manager, Cliniques Universitaires Saint-Luc Brussels (Belgium)
Marc Noppen
Chief Executive Officer, University Hospital UZ Brussel
Christian Bouffioux
Honorary Medical Director, University Hospital Liège, Belgium
Johan Kips
Chief Executive Officer, University Hospital KULeuven

Free Paper
15:00 - 15:30 Coffee

15:30 - 17:00 **Parallel Sessions**

Health Records in Digital Age: Managing Knowledge Meaningfully with ICD-11 in Hospitals
Japan Hospital Association

Sustainable Health System Financing in Canada: Challenges and Solutions.
Canadian Healthcare Association
Pamela C. Fralick
President & CEO, Canadian Healthcare Association (CHA)
John Abbott
CEO, Health Council of Canada (HCC)
Danielle Frechette
Director, Office of Health Policy, Royal College of Physicians and Surgeons
Hugh MacLeod
President and CEO, Canadian Patient Safety Institute (CPSI)
Marian Walsh
President & CEO, Bridgepoint Health

New Technology and its impact on health care services
Norwegian Hospital and Health Service Association
Erik K. Normann
Director, The Norwegian Directorate of Health, Department of Hospital Services
Susann Baeckstroem
Manager of clinical systems, Norwegian Centre for Telemedicine (NST)
Astrid Buvik
MD, Orthopedic surgery department, University Hospital of North Norway (UNN)
Markus Rumpsfeld
Ph.D, MD, Director for Division of Internal Medicine, University Hospital of North Norway

Retaining High Quality of Care through the New breed of Medical Graduates
Saudi Arabia Chapter
Salem Malik
Advisor and General Supervisor of International Affairs Ministry of Higher Education
Abdullah Al Shammery
Chairman Saudi Board of Restorative Dentistry, Dean, Riyadh Colleges of Dentistry & Pharmacy

Free Paper
17:00 - 18:30 B2B Networking

DAY 2: WEDNESDAY, NOVEMBER 09

09:00 - 10:00 Plenary Session

Quality & Safety: What's New? TRACEY COOPER
President-Elect - International Society for Quality in Health Care (ISQua) Chief Executive -The Health Information and Quality Authority (Ireland)

10:00 - 11:30 **Parallel Sessions**

Brazilian Experience in Public-Private Partnership Scope – More Medical Effectiveness & Long-Term Sustainability Brazil (CNS)
Afonso José de Matos
President Director Planisa – São Paulo – Brazil
Thelma Battaglia Rezende
Representative of FIOCRUZ – Rio de Janeiro – Brazil
Roser Vicente Ruiz
Director General of Gesaworld – Barcelona – Espanha

Sustaining Quality, Performance and Cost-effectiveness in a Public Hospital System

Hospital Authority Hong Kong
PY Leung
Chief Executive, Hong Kong Hospital Authority
Nancy Tse
Director (Finance), Hong Kong Hospital Authority

Patient safety culture assessment: a way to enhance safety at hospital/unit level

Portuguese Association for the Hospital Development (APDH)
Prof. Carlos Pereira Alves
Vice-Chair, Portuguese Association for the Hospital Development (APDH)
Joann Sorra
PhD, Senior Study Director, Westat
Margarida Eiras
School of Health Technologies of Lisbon, Polytechnic Institute of Lisbon, Portugal
Pedro J. Saturno
School of Medicine, University of Murcia (Spain), International Health Systems Program
Harvard School of Public Health
Hospitals & Corporate Partnerships – Social Responsibilities University Hospital Chapter

Free Paper

11:30 - 12:00 Coffee

12:00 - 13:00 Plenary Session

Durhane Wong-Rieger PhD (Canada) Chair Elect - International alliance of patients' organizations (IAPO)

13:00 - 14:00 Lunch

14:00 - 15:30 **Parallel Sessions**

Addressing Organization Ethics in Healthcare

American College of Healthcare Executives
Thomas Dolan
CEO, American College of Healthcare Executives
William Nelson
Director, Rural Ethics Institute, Darmouth Medical School
Gayle L. Capozzalo
Executive Vice President, Strategy/System Development, Yale New Haven Health System
Rulon F. Stacey
President and CEO, Poudre Valley Health System

Design for new qualities in health care facilities in a fast changing environment

The International Union of Architects (Public Health Group)
Hans Eggen
Director of the UIA WP Public Health, Bern, Switzerland
Jonathan Erskine (UK)
Executive Director, European Health Property Network
Zakia Shafie (Egypt)
Thomas Riffel
Manager Life Science & Healthcare, Siemens Switzerland LTD
Dipl. -Ing. Lüder F. Clausdorff
Architect Interieurdesigner AKH, BDA-AKG

Development of Healthcare Projects in Kuwait to Meet the Future Demand

Kuwait MoH
Ibrahim Al Abdul Hadi
Under Secretary for Health
Samir Al Asfor
Assistant Under Secretary for General Services

WHO

Free Paper

15:30 - 16:00 Coffee

16:00 - 17:00 Plenary Session

Key Challenges in Sustainable Financing of Healthcare

MARK PEARSON
Head of the Health Division
Organisation for Economic Cooperation and Development (OECD)

17:00 - 18:30 B2B Networking

Day 3: Thursday, November 10

09:00 - 10:00 Plenary Session

Opportunities to increase productivity In Delivery of Hospital Services: Enhancing Value in Healthcare

Lee Chien Earn
Deputy Director of Medical Services - MoH Singapore

10:00 - 10:30 Coffee

10:30 - 12:00 **Parallel Sessions**

International Benchmarking Experiences for Effective Purchasing

Group Purchasing Chapter
Dominique Legouge
Director, RESAH-IDF -France Speakers:
Jean Michel Descoutures
Chef de Service (Pharmacy) Centre hospitalier Victor Dupouy (Argenteuil), France
Alyson Brett
Chief Executive, NHS South East Coast Collaborative Procurement Hub, UK
Sandra Zuzzi
ULSS (Italy)
Curtis Rooney
President, Health Industry Group Purchasing Association (HIGPA), USA

Improving Quality and Patient Satisfactions in Middle Eastern Healthcare Facilities and Programs through Accreditation by a Regional Accreditation Body

Jordan Healthcare Accreditation
Edward Chappy
Chief of Party, Jordan Healthcare Accreditation Project
Ahmed Al Khateib
CEO, Health Care Accreditation Council (Jordan)
MDR-TB Control, Management and Treatment in healthcare facilities: ethical duty and obligation to care
M. D'Arcy Richardson
RN, PHN, CNS, MSN, Technical Director, TB Program, Program for Appropriate Technology in Health (PATH), USA (tbc)
Mônica Kramer de Noronha Andrade
Pulmonologist, Chief Session of Teaching & Research Professor Helio Fraga Reference Center, National School of Public Health - Oswaldo Cruz Foundation, Brazil (tbc)
Mark E. Huizenga
Chairman of the Board of Directors, Health Development International and Health Care Consultant, Summit Insights, USA
Mohamed Abdel Aziz
Regional Advisor for Stop TB Programme, WHO EMRO Regional Office

Free Paper

12:00 - 12:30 Closing Ceremony
12:30 - 13:30 Lunch
Hospital Tour / Post Events

Conference Registration Form

REGISTER NOW

DUBAI IHF 2011
37th World Hospital Congress

International Hospital Federation
37th World Hospital Congress

8 - 10 November, 2011 | ATLANTIS The Palm, Dubai - UAE

Title: ☐ Dr. ☐ Mr. ☐ Mrs. ☐ Ms.

Name: (Please write in BLOCK letters) .....

Institution (Hospital/Clinic): .....

Designation: .....

Address: ..... Country: .....

P.O. Box: ..... City: .....

Tel: ..... Mobile: .....

Fax: ..... E-mail: .....

Registration fee

Option 1 - Package Fees: includes lunch & coffee, gala dinner and welcome reception

		Early bird (before 10th June, 2011)	Pre-registration (after 10th June, 2011)	On-site registration
Main Congress	☐ IHF Member	AED 2930 (US$ 795)	AED 3220 (US$ 875)	AED 3300 (US$ 895)
	☐ Non Member	AED 3150 (US$ 855)	AED 3480 (US$ 945)	AED 3550 (US$ 965)

Option 2 - Non Package Fees

		Early bird (before 10th June, 2011)	Pre-registration (after 10th June, 2011)	On-site registration
Main Congress	☐ IHF Member	AED 2210 (US$ 600)	AED 2500 (US$ 680)	AED 2580 (US$ 700)
	☐ Non Member	AED 2430 (US$ 660)	AED 2760 (US$ 750)	AED 2840 (US$ 770)

Main Congress	☐ Accompanying person	AED 1100 (US$ 300)
Social Program	☐ Welcome Reception	Free for Registered Participants
	☐ Gala Dinner	AED 740 (US$ 200)

*Accompanying person: Accompanying persons' registration is limited to the participant's family only.

Payment can be made either by cash or credit card to: **INDEX® Conferences & Exhibitions Organisations Est.**

Payment Details: ❒ Cash ❒ Visa ❒ Master Card

Credit Card No. |_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_| Expiry Date |_|_| MONTH |_|_|_|_| YEAR

Name on Card .....

Authorisation Note

Please debit my credit card with an amount of AED ..... I, ... the card holder will honor this transaction and not hold INDEX® Conferences & Exhibitions Organisation Est. responsible if the credit card has been compromised.

Cancellation Policy

Any changes or cancellations must be received in full and in writing. Refunds will be issued according to the reimbursement rules. Please allow a minimum of 8 weeks for processing any refund. Refunds are based on the total transactions for all registration fees, courses, tours, and social events. Participants area advised to keep a copy of the registration form.

Cancellation Dates:
Before 10th June, 2011 90% reimbursed
Between 10th June and 10th August 2011 80% will be reimbursed
After 10th August 2011 no reimbursement

Group Registration

Please Contact **Mr.Siddarth Nanthur** ;
Mobile : +971558106434 ; Email : Siddarth.nanthur@index.ae

Signature.....

Date.....

INDEX Conferences and Exhibitions Org. Est
P.O. Box 13636, Dubai - UAE | Ibn Sina Bldg. Block B, Office 203 | Dubai Health Care City
Tel + 971 4 362 4717, Ext 127 | Fax + 971 4 362 4718 | E-mail: ihfdubai@index.ae | Website: www.ihfdubai.ae

Conference Registration Form

Hotel Information

All Your Hotel Needs For the World Hospital Congress

*Stay at **The ATLANTIS**, the Palm - Dubai!*
The Headquarter Hotel for IHF Dubai 2011.

Rates- **AED 1200**/- (Single or Double Occupancy) per room per night

Includes – 10% Municipality Fees & 10% Service Charge

Breakfast at an additional cost at AED 140/- per person per day

- Complimentary access to Aquaventure, the largest water theme park in the Middle East
- Complimentary access to Lost Chambers
- Complimentary access to pools and beach area

Other selected Hotels near the Congress venue

- Radisson Blu Hotel Dubai Media City ★★★★★
- Arjaan Rotana Dubai Media City ★★★★
- Suite Novotel Mall of the Emirates ★★★
- Ibis Mall of the Emirates ★★

For Tailor Made Leisure Activities and Hotel Bookings, Contact :

Mr. Bruno Britto

Email	bruno.britto@index.ae
Mobile	+971 55 957 7977
Office	+971 4 362 4717

Hotel Information

Contents volume 47 number 2

Editorial Office
Immeuble JB SAY,
13 Chemin du Levant,
01210 Ferney Voltaire, France
Email: info@ihf-fih.org
Internet: www.ihf-fih.org

Subscription Office
International Hospital Federation
c/o Fairfax House, 15 Fulwood Place,
London WC1V 6AY, UK
Telephone: +44 (0) 20 7969 5500;
Facsimile: +44 (0) 20 7969 5600

ISSN: 0512-3135

Published by Pro-Brook Publishing Limited for the International Hospital Federation

6 Deben Mill Business Centre
Woodbridge
Suffolk IP12 1BL
United Kingdom
Tel: +44 (0) 1394 446006
Fax: +44 (0) 1473 249034
Internet: www.pro-brook.com

For advertising enquiries contact our Communications Manager at ioana@ihf-fih.org

World Hospitals and Health Services is published quarterly. All subscribers automatically receive a copy of the IHF reference books. The annual subscription to non-members for 2011 costs £175 or US$250.

World Hospitals and Health Services is listed in Hospital Literature Index, the single most comprehensive index to English language articles on healthcare policy, planning and administration. The index is produced by the American Hospital Association in co-operation with the National Library of Medicine. Articles published in World Hospitals and Health Services are selectively indexed in Health Care Literature Information Network.

The International Hospital Federation (IHF) is an independent non-political body whose aims are to improve patient safety and promote health in underserved communities. The opinions expressed in this journal are not necessarily those of the International Hospital Federation or Pro-Brook Publishing Limited.

Editorial

ERIC DE ROODENBEKE
CHIEF EXECUTIVE OFFICER, INTERNATIONAL HOSPITAL FEDERATION

With the coming UN high level summit on Non Communicable Diseases[1] (NCDs) there is suddenly a new interest in NCDs for low income countries after a decade during which it has been impossible to bring any topic on the international agenda without making a strong link to the MDGs.

Is this a good thing?

There are two major issues that should be considered in answering this question.

Although MDGs represent a major commitment of the international community should we always try to find direct links between these MDGs and sector interventions?

Are we focusing on the right approach when putting forward the need of intervention on NCDs ?

There has been a strong temptation from health professionals to advocate for interventions having some potential impact on MDGs indicators as these are linked to health status. This trend has driven a mobilization of the three big ones (malaria, tuberculosis and Aids) as well as the maternal and child health sector. But the health interventions in these areas can be successful only to certain extent: when countries are coming from a very low level and important resources are dedicated to implement these interventions. If we look at the situation of the MDGs, the countries that are on track are mostly those who have benefited from a very positive economic growth and/or an evolution of their governance and social system without massive "MDGs targeted health programmes"; while the ones having benefited from large MDGs related programmes are often off track. In addition, after a push on fighting diseases, all stakeholders have agreed that health system issues have to be addressed but this may have come too late to be able to achieve MDGs targets. Last but not least, the focus on MDGs has brought a major divide among countries. All developed and emerging nations have considered MDGs activities to have no interest for them as their health concerns were of another nature.

If from a perspective of evolution of death and morbidity there is no doubt that NCDs play a growing role in the health status of the population, it is not evident that addressing particular NCDs does not put the international community at the same risk of failure as it has been for the targeted diseases of MDGs programmes. Regardless of the rhetoric, the approach on NCDs remains mostly disease specific and prevention focused. It is clear that some results can be achieved by adoption of public health measures in countries which are lagging behind. It is also obvious that a multi sector approach will also help in reducing some of the risks. However, in the longer term do we address the right issues by focusing on NCDs with the same paradigm used to deal with health threats in the last decade?

Although reduction of risk remains in all cases important, it is also obvious after so many limited successes on prevention that this is certainly not enough to address the major issues from both developed and developing world. There is a global need to change the full paradigm by which health is addressed especially if we consider that all countries will have to face an ageing population. All societies will be facing a growth of multi-chronic conditions. Addressing the NCDs just by single disease oriented programmes will not work.

The discovery of NCDs can be called the Colombus effect as it is well presented in the first article of this edition replacing the Moscow conference in the historical perspective of the role of hospitals in this area. Taking care of NCDs patients is the daily bread and butter of developing countries hospitals. There is a major risk that this rediscovery of NCDs will not harvest the know-how developed in hospitals and will not consider the urgency to address now the continuum of care of multi-chronic condition patients

On external factors like consumption of tobacco and alcohol as well as unhealthy food there is major responsibilities from governments to go beyond some form of hypocrisies on the regulation of products known for their devastating effects on health. Trying to change individual behaviour while allowing products to be marketed is a game that will never be won!

Making prevention mainly a mass campaign communication issue is also of limited potential success. After an initial pick up there is a draw back and a large part of behaviour that are not changed. On the contrary, a massive systematic use of the opportunity for a strong prevention programme for patients at an early stage of disease is very effective, but unfortunately not enough attention and resources have been provided for healthcare services to accomplish this task. The health promoting hospital initiative[2] is certainly a very promising approach which would need more attention and support. The article on NCD health literacy is a very good illustration of a paradigm shift in prevention as a part of continuity of treatment of patients.

Hospitals are often under valued for their role in research for public health. The very interesting article on hospital employees in Nigeria is a demonstration that research can be performed effectively in low resource setting. It shows also the limitation of prevention messages and what can be expected from them. On

the contrary, there is a lot of perspective with an effective intervention of occupational health to help people change their food behaviour by a better understanding of their individual situation and mind set. The health workers behaviour is key to formulating appropriate messages on eating behaviour and health. If success is not obtained with them, what can be expected from the general population?

Moving patients from hospitals to home care is usually presented as an alternative for chronic conditions. But this may be a short cut from reality for many chronic diseases. In fact, patients need hospitalization for acute episodes and a follow up at home. The study on heart failure patients presented in this issue is a good example of the need to complement hospital care by home care to improve patients' quality of life. In many countries to implement a real continuity of care it is necessary to reform the organization and the funding of delivery system.

But for a paradigm shift there is a need to educate health professionals differently. If the major challenge is to redesign the curricula of health professionals, it is also possible to re-train on site the health professionals. The example of the NHS is to be looked at. It demonstrates that an appropriate training can change the effectiveness of clinicians in helping patients to self manage their situation. The fact that this example is related to depression is not neutral as this is a major NCD that is mysteriously out of the picture of the NCDs approach for the UN summit. Another demonstration of the major risk of a disease oriented approach: letting out major health and social problem is the consequence of such targeted approaches.

Although there are major efforts to engage in making health services work better, the situation in Russia is an excellent reminder of what is often lost of sight: health status of a population will improve not only because health services and programmes are effective. They will improve as a result of a full change of the social and economical model in which people live in. This is not new, but the case of Russia highlights the difficulties to engage a real change in a society which has gone through a major revision of its own organization after the fall of Berlin Wall.

In addition to the section on Chronic conditions affecting role of hospitals both in developing and developed world there are still possibilities to improve the utilization of health services. The case of over hospitalization is a good example of the limitation of internal management measures. Hospitals are perfect indicator of the state of the health system. They are at the end of the chain of care. Fixing the inadequate utilization of hospitals is possible only as a join effort between those in charge of hospitals and those in charge of front line care. This is another demonstration of the importance of the system approach where results will be achieved only if all components are fully taken on board.

This edition does not intend to cover all the issues required to deal with multi-chronic conditions, but we hope that it will participate in opening up the debate to move the discussion at national level and in the international arenas from where it stands now to a real paradigm shift. The more we address systemic matters with short term approaches, the more difficult it will be to deal with the challenges all countries will have to face with ageing population and the growth of multi-chronic conditions. The OECD has started a very positive move[3] in this direction. The Geneva Health Forum 2012[4] will provide a very good opportunity to open up the discussion on chronic conditions in low income countries. We certainly hope to meet you there. ❑

References

1. http://www.who.int/nmh/events/un_ncd_summit2011/en/
2. http://www.hphnet.org/
3. http://www.oecd.org/document/15/0,3746,en_2649_37407_47671759_1_1_1_37407,00.html
4. Please monitor the forum website : http://www.ghf12.org/

The Columbus Effect: The donor Community's "Discovery" of Non-communicable diseases

JEREMIAH NORRIS
DIRECTOR, CENTER FOR SCIENCE IN PUBLIC POLICY, HUDSON INSTITUTE

KACIE MARANO
PROJECT MANAGER, THE CENTER FOR SCIENCE IN PUBLIC POLICY, THE HUDSON INSTITUTE

ABSTRACT: On 28-29 April, 2011 the First Global Ministerial on Healthy Lifestyles and Noncommunicable Diseases (NCDs) convened in Moscow to galvanize support and provide policy guidance for the forthcoming UN High-Level Meeting on NCDs in September 2011. Subsequently, the World Health Organization (WHO) drafted the "Moscow Declaration", placing itself at the global epicentre of NCD prevention and control, working collaboratively with its sole client in Member States, ministries of public health. The Declaration took no note of the extensive and ongoing activities of developing country owned and operated hospitals in the developing world and their clinical participation in NCD prevention and care for the past four decades.

This article will review the global burden of NCDs in the developing world; the identification of NCDs by reliable sources decades before the "Moscow Declaration"; the role of hospitals in addressing them despite the absence of donor support; the considerable extant investments made by public and private entities in building inpatient and out-patient facilities; and how donors have overlooked the already established hospital-based industry within developing economies.

Since the founding of WHO in 1948, it has been the leading force in marshalling donor health assistance targeted on communicable diseases. However, in a 2005 report, WHO found that the highest mortality rate in the world is due to cardiovascular diseases (CVDs), which account for 31% of the total. Figure 1 depicts global deaths by specific causes for all ages in 2005. Now, years after this report, the donor community through the UN High-Level Meeting is shifting its focus onto the growing threat of NCDs in the developing world.

Precursors to the emergence of NCDs

With NCDs, there is a "Christopher Columbus" mentality to disease interventions in the global health community. Donors are now giving attention to them as if NCDs are akin to a newly discovered continent. However, reliable sources identified their emergence decades ago, and developing countries themselves invested heavily in building and operating hospital systems to address them.

A central focus on communicable disease prevention was to decrease the rate of infant mortality. The "inevitable consequences" of success in that arena spawned the onset of "an aging population with formidable and costly needs for care as they face the burden of chronic diseases."[2]

In 1992, the World Bank found that "the consequences of adult ill-health are substantial, larger than had been supposed previously, and larger than the consequences of illness in non-adults." It went on to comment "any impairment [in the health of adults] of its capacity through disease or disability will inevitably lead to a decline in national productivity and a slowdown in overall national development, affecting the health of persons of all ages within the population."[3]

In 1996, a collaborative study by the World Bank, WHO, and the Harvard School of Public Health stated that "adults under the age

FIGURE 1: GLOBAL DEATHS BY CAUSE FOR ALL AGES IN 2005 (SOURCE: WORLD HEALTH ORGANIZATION)[1]

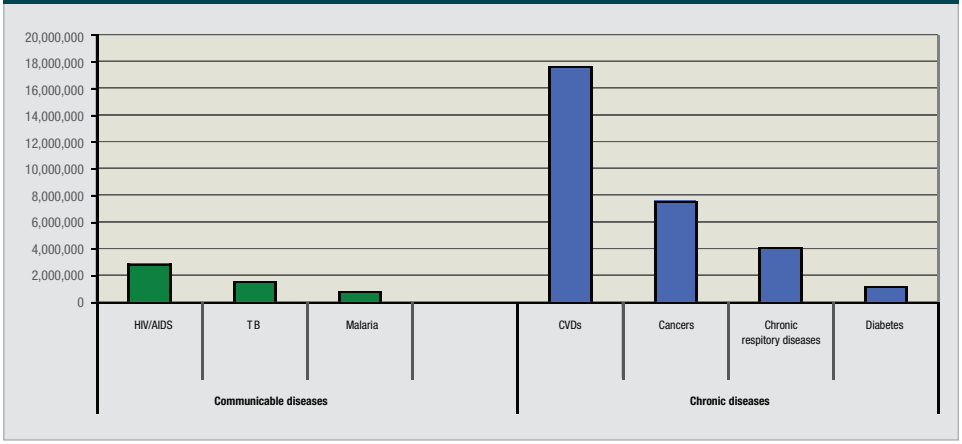


Figure 2: Hospital Beds in the Developing World vs. the Developed World[12]

Region		Hospital Beds (per 10,000 people)
Developing World	Central Africa	43
	Southeastern Africa	13
Developed World	Western Europe	69

Hospital beds are defined to include inpatient beds available in public, private, general, and specialised hospitals and rehabilitation centres.

of 70 in sub-saharan Africa today face a higher probability of death from a non communicable disease than adults of the same age in the Established Market Economies."[4]

As children survive the ravages of parasitic and infectious diseases, the surviving cohorts become candidates for chronic diseases. Therefore, a clear signal for the emergence of NCDs can be found in the successful battle against communicable diseases. In the World Bank report for 1999, statistical tables illustrated that in Lower Middle Income Countries, the infant mortality rate declined from 61/1000 in 1980 to 38/1000 in 1997.[5]

According to the World Economic Forum's 2009 report, "noncommunicable diseases are among the most severe threats to global economic development, more likely to be realized and potentially more detrimental than fiscal crisis, natural disasters, or pandemic influenza."[6]

The threat of NCDs should have been no surprise to policy-makers, but just as it took Spain centuries to understand that the world isn't flat, donors have ignored these signs and are now "discovering" NCDs.

The demographic transition and its effects on hospitalization

The root causes behind the emergence of NCDs in the developing world can be found in the demographic component of the health transition which has inexorably increased the proportion of adults relative to the under 14 population. In 1989, the World Bank reviewed the propensity to hospitalise in China and Cote d'Ivoire, scaled to be proportional to the "rate of hospitalisation among five to fourteen year olds in each country. The five to fourteen year olds were not only less likely to be ill, but also least likely to be hospitalised when ill. In contrast, adults were more likely to be ill and more likely to incur the substantial expense of hospitalization."[7]

The World Bank commented further in its 1989 report by saying "the current 60 to 80% of hospital care devoted to adults will increase even further and the demand for treatment of NCDs will also increase. More specifically, adults dominate Korean hospital activity in the forty to fifty-nine age group, NCDs represent 82 percent of admissions and 76% of outpatient visits."[8]

In the interim from 1989 to the present, the demographic transition has continued apace, with improvements in infant mortality and life expectancy rates. By 2020, "more than two-thirds of the world's population over 60 will live in developing countries."[9]

What is the supply of hospital beds in the developing world to manage this new demand for NCDs, and how would it compare with the developed world? Central and Southeastern Africa have a population roughly equal to that of Western Europe, 380 million to 392 million, respectively[10]. Obviously, they have major differences in life expectancy, with it being on average 63 years of age in Africa and 77 in Western Europe. Still, in time, Africa – with a 5.5% economic growth rate in 2010, will move to where Western Europe is today.[11]

Developing countries capacity in addressing NCDs

Absent donor assistance to the growing threat of NCDs, developing countries have taken their own measures to combat them. They have been expending the majority of their national health resources in hospitals since at least 1984, and as the World Bank has reported, largely for patients above the age of 15 years with chronic conditions. In addition, many of the healthcare facilities have earned approval ratings through the highly reputable Joint Commission International (JCI) which has accredited organisations in 39 countries and over 300 public and private healthcare facilities. Most are in aid-assisted countries, e.g., 45 are in Turkey, 25 in Brazil, 17 in India. Others with more than two facilities are located in Bangladesh, China, Costa Rica, Ecuador, Egypt, Ethiopia, Indonesia, Jordan, South Korea, Lebanon, Malaysia, Mexico, Pakistan, the Philippines, Thailand, Viet Nam and Yemen[13].

One hospital network, the Aga Kahn Hospitals, is in Dar es Salaam, Mumbai, Kisumu, Mombasa, Nairobi and Pakistan. The services provided range from pediatric closed heart surgery to post-graduate medical education in all major clinical specialties. The hospitals are managed by the Aga Kahn Health Services, one of the most comprehensive non-profit health systems in the developing world. It manages nine hospitals and 325 health facilities, 15 referral facilities, including diagnostic centres, rural medical and maternal care centres and six general and three women hospitals. All of their inpatient and out-patient services are free of charge, and mainly serve the poor[14].

In addition to the establishment of hospital networks that serve the poor, developing countries have also become health care attractions for citizens of donor countries. Medical tourism is a major multi-billion dollar industry in Malaysia, India, and Thailand, each one an aid-assisted country. The largest health care group in Asia, the Apollo Hospitals, is based in India and it frequently collaborates with Johns Hopkins Medicine International[15]. India intends to be the global center of medical tourism. At present, it is the largest service sector with estimated revenue of US$35 billion, constituting 5.2% of India's GDP, and employs 4 million people. By 2012, the Indian health industry is expected to grow at 15% per annum, with revenues of US$78.6 billion, reaching 6.1% of GDP, and employing 9 million people[16].

Hospitals categorized in the rise of medical tourism offer a wide range of procedures including coronary artery bypass grafts, spinal fusions, balloon angioplasty, orthopedics, cosmetic surgery, gastric bypass, prostate surgeries, and hip and knee

The root causes behind the emergence of NCDs in the developing world can be found in the demographic component of the health transition which has inexorably increased the proportion of adults relative to the under 14 population

replacements. Insurance companies in the US bundle patients for overseas destinations because the cost for one of these procedures is significantly less than what it would be had they remained home. An added benefit in India, Thailand and Malaysia is that patients can recuperate in 5-star beach resorts—all for the price of a surgical procedure.

Religious organizations also have a long standing history dealing with NCDs in the developing world. The WHO estimates that in most sub-Saharan African Nations 40% of health service provision is faith-based[17]. In 1969, the World Bank reported that 37% of all inpatient admissions to Mission hospitals were for NCDs alone[18].

Donor NCD vs. Governments expenditures in low and middle income countries

In November 2010, the Institute for Health Metrics and Evaluation at the University of Washington published a report on Donor Assistance for Health (DAH). It found that DAH had jumped from about $8 billion in 1995 to $26.8 billion in 2010. In the same report, the Institute stated that DAH for NCDs had only increased from 0.10% in 2000 to 0.12% in 2008[19].

However, donors' lack of resources to NCDs does not mean that countries themselves were failing to see the importance of NCDs. While donors were pouring more and more resources into communicable diseases, they failed to notice that recipient countries were expending large portions of national health allocations on hospitals for chronic care and treatment. For instance, as far back as 1984, the World Bank records that Malawi was spending 81% of its total public recurrent health expenditures on hospital care; 75% in Jordan; 74% in Lesotho; 73% in Kenya; 72% in Jamaica; 71% in the Philippines; 71% in Sri Lanka; 70% in Somalia; 68% in Brazil; 67% in Colombia; 54% in Zimbabwe. Of the hospital expenditures listed above for these countries, "all use at least 70% of their resources on adult and elderly patients."[20]

Although the World Bank hospital expenditures are dated, more recent data confirm the fact that they continue to increase. Brazil can be an example in this regard. In 2008, local researchers estimated the costs of severe CVD cases based on hospitalized case lethality and total CVD mortality rates. Approximately 2 million cases of severe CVD were reported in 2004, accounting for 5.2% of the population over age 35 years of age. The resulting annual costs of $30.8 billion were divided into these categories:

- 36.4% were for health care;
- 8.4% for Social Security and employers' reimbursement;
- 55.2% due to loss in productivity;
- direct costs accounted for 8% of total national health expenditures;
- and, 0.52% of Brazil's 2004 GNP[21].

> While donors were pouring more and more resources into communicable diseases, they failed to notice that recipient countries were expending large portions of national health allocations on hospitals for chronic care and treatment

Conclusion

WHO has recommended that the donor response to NCDs be limited to four diseases: CVDs, cancer, diabetes, and upper respiratory diseases. Only four risk factors should be considered: smoking cessation; physical inactivity; alcohol use; and diet.

These limitations are contrary the clinical standards of most developing countries which have Constitutional guarantees to open and free access on healthcare. Most importantly, they reflect donor priorities, attempting to force-fit them into those already in place by the countries themselves. They represent the values of 'discoverers' ring-fencing their newly found possessions around indigenous institutions.

Hospitals in the developing world will continue to absorb the largest share of national health expenditures, independent of anything the global health community will do with its recent "discovery" of these diseases. If WHO is successful in guiding donor support for NCDs, then it will have to post this notice in public hospitals supported by donors:

If you have a CVD, cancer, diabetes, or an upper respiratory infection, with one of the four designated risk factors, welcome! Otherwise, please move on to one of our nation's local hospitals which offer comprehensive NCD prevention, care and treatment.

Such a policy outcome from the WHO recommendations has no clear or fair rationale. It is unlikely to resonate with the professional medical societies in the developing world which provide clinical staffing of hospitals for NCDs. They can be as territorial in Kenya as they are in Kansas, especially when their entrenched interests are threatened. ❑

Jeremiah Norris is the Director, Center for Science in Public Policy, at Hudson Institute. Before joining Hudson, he was Director for International Operations with the WebMD Foundation, and senior adviser for Harvard Medical School's international programmes, leading teams in the evaluation of Sao Paulo's healthcare reform system.

Kacie Marano is the Project Manager at the Center for Science in Public Policy at the Hudson Institute. Ms. Marano earned her Master's in International Affairs from The American University in Washington, DC. Ms. Marano has field experience working on HIV education in Lusaka, Zambia and Human Rights Education in Kathmandu, Nepal.

References

1. World Health Organization, Preventing Chronic Diseases: A Vital Investment, (Geneva: The World Health Organization, 2005), [284], accessed June 10, 2011, http://www.who.int/chp/chronic_disease_report/full_report.pdf.
2. William J. Bicknell and Cindy Lou Parks, "As Children Survive: Dilemmas of Aging in the Developing World," *Social Science and Medicine* 28(1) (1989): 59.
3. Richard Feachem et al., the Health of Adults in the Developing World, (Washington, D.C.: World Bank, 1992), IX.
4. Christopher J. L. Murray et al., The Global Burden of Disease: a comprehensive assessment of mortality and disability from disease, injuries, and risk factors in 1990 and projected to 2020; summary, (Boston, MA: *Harvard School of Public Health*, 1996), 3.
5. World Bank, Washington D.C., World Development Report 1999-2000: Entering the 21st Century, (Washington, D.C.: World Bank, 2011).
6. K.M. Venkat Narayan, Mohammed K. Ali, and Jeffrey P. Koplan, "Global Noncommunicable Diseases – Where Worlds Meet," *The New England Journal of Medicine* 363(13) (2010): 1196.
7. Richard Feachem et al., *the Health of Adults in the Developing World*, (Washington, D.C.: World Bank, 1992), 175.
8. Richard Feachem et al., *the Health of Adults in the Developing World*, (Washington, D.C.: World Bank, 1992), 176.
9. USAID, "Foreign Aid in the National Interest: Promoting Freedom, Security, and Opportunity," USAID (2002): 78, accessed June 10, 2011, http://www.usaid.gov/fani/Full_Report--Foreign_Aid_in_the_National_Interest.pdf.
10. Danny Dorling, World Mapper Project. University of Michigan and University of Sheffield, accessed June 9th, 2011 http://www.worldmapper.org/display.php?selected=221.
11. Antionette Sayeh, Director, African Department of the IMF, and former Minister of Finance, Liberia. Public statement made at the 10th Anniversary of the founding of the Center for Global Development, Washington, D. C., June 6.
12. Danny Dorling, World Mapper Project. University of Michigan and University of Sheffield, accessed June 9th, 2011 http://www.worldmapper.org/display.php?selected=221.
13. "Accredited Organizations," Joint Commission International, accessed June 10, 2011, http://www.jointcommissioninternational.org/JCI-Accredited-Organizations/.
14. "The Aga Khan Hospitals," The Aga Khan Hospitals, accessed June 10, 2011, http://www.agakhanhospitals.org/.
15. "Medical Tourism Destinations: India," Medical Tourism: Quality, Affordable Healthcare, accessed June 10, 2010, http://medicaltourism.com/destination/destination-item.php?title=India&lang=en.
16. "Health," Federation of Indian Chambers of Commerce and Industry, accessed June 10, 2011, http://www.ficci.com/sector-details.asp?secid=18.
17. "Building from Common Foundations: the World Health Organization and Faith-Based Organizations in Primary Healthcare." World Health Organization and Geneva Global: 2008. http://www.ccih.org/bulletin/0608files/BuildingFromCommonFoundations_WHO_and_FBOs.pdf
18. R. Feachem, T. Kjellstrom, C. Murray, M. Over and M. Phillips, edit., The Health of Adults in the Developing World, (New York: Oxford University Press, Published for the World Bank, 1992), 177.
19. Institute for Health Metrics and Evaluation, Financing Global Health 2010: Development Assistance and Country Spending in Economic Unceartainty, (Seattle, WA:IHME [University of Washington], 2010).
20. R. Feachem, T. Kjellstrom, C. Murray, M. Over and M. Phillips, edit., *The Health of Adults in the Developing World*, (New York: Oxford University Press, Published for the World Bank, 1992), 171.
21. Maria Inês Reinert Azambuja, Murilo Foppa, Mário Fernando de Camargo, and Aloyzio Cechella Achutti, "Economic Burden of Severe Cardiovascular Diseases in Brazil: an estimate based on secondary data," *Arquivos Brasileiros de Cardiologia*, 91(3) (2008): 148-55.

NCD health literacy – what can hospitals do?

SCOTT RATZAN
VICE PRESIDENT, GLOBAL HEALTH, JOHNSON & JOHNSON

FRANKLIN APFEL
MANAGING DIRECTOR AND FOUNDING PARTNER, WORLD HEALTH COMMUNICATION ASSOCIATES LTD

ABSTRACT: Noncommunicable disease (NCD) health literacy is a person's ability to access, understand and use information to prevent, treat and manage chronic illness. Poor health literacy is shown to be associated with riskier behaviour, poor health choices and poorer health. Hospitals can play an important role in enhancing people's NCD health literacy all the way along a patient's "NCD journey" from prevention to management by aligning their communications to the health literacy capacities of their users. The authors suggest training providers to communicate more effectively with patients, making their systems easier to navigate, simplifying written materials, incorporating the use of technology and mobile-health, and using individual and system level scorecards and checklists.

Chronic or noncommunicable disease (NCD) health literacy relates to people's ability to access, understand and use information to prevent, treat and manage chronic illnesses such as cardiovascular diseases (CVDs), diabetes, cancers, chronic lung diseases and mental disorders.

NCD health literacy capacity, competence and related choices are not just determined by an individual's basic literacy skills and motivations. They are also defined by the interaction (or alignment) of these skills with the demands, complexities and reliability of information received in the systems and marketplaces within which information is sought, received, interpreted and used (see Figure 1).

NCD health literacy capacity and competence varies by context and setting. It is dependent upon (and often predictable, based on) the interplay of individual and system factors. These factors include both user and provider communication skills and knowledge of health topics, media literacy, culture and the specific characteristics of the health care, public health and other relevant systems and settings where people obtain and use health information (*Healthy People*, 2010). When these services or systems require knowledge or a language level that is too high for the user, or misinformation is communicated, health will suffer.

Why is this important?

WHO estimates that NCDs account for 63% of all global deaths, placing a high burden on individuals, families, communities, health systems and national economies. It can be significantly reduced, with millions of lives saved and untold suffering avoided, through reduction of NCD risk factors, early detection and timely treatments. Poor NCD health literacy is a key obstacle to accomplishing this goal.

Surveys in the United Kingdom, United States, Australia and Canada have shown poor health literacy skills in 20% to 50% of the population. Poor NCD health literacy leads to less healthy choices, riskier behaviours, poorer health, more hospitalizations and higher healthcare costs (IOM, 2004).

Conversely, health literacy strengthening through communication and education programmes, when integrated into comprehensive strategies, have successfully catalysed behavioural changes related to lifestyle risk factors like tobacco and alcohol aversion, nutrition and exercise (WHO, 2009); enhanced medication compliance (Wolf, 2005); reduced hospitalizations and mortality (Baker et al, 2007).

What are NCD health literacy capacities?

NCD health literacy is best viewed as a dynamic continuum of skills. People's needs change over time as they face different challenges. The need for new health literacy skills arises, for example, at the onset of chronic illness. No one is ever totally health literate. Everyone at some point needs help in understanding or acting upon important health information. Even highly educated individuals may find systems too complicated to understand, especially when made more vulnerable by poor health.

NCD health literacy skills include basic reading, writing, numeracy and the ability to communicate and question. Health literacy also requires functional abilities to recognize risk, sort through conflicting information, make health-related decisions, navigate often complex health systems and 'speak up' for change when health system, community and governmental policies and structures do not adequately serve needs.

How can hospitals help?

Hospitals can be made more NCD health literacy friendly in a

Figure 1: Health Literacy Framework (Parker R in Hernandez 2009, p.91)

variety of ways. Workers may be trained to recognize the specific needs of users and assist them in navigating systems. Information – such as forms, signs and letters – can be made more accessible and understandable. If done appropriately, this can help align system demands to user skill levels and improve user ability to access health systems, assess risks, select appropriate pathways of care and engage in self-care. Hospitals can also advocate for and shape the 'NCD health literacy friendliness' of other systems and settings. They can do this by raising awareness of the negative health consequences of weak health literacy skills and, importantly, identifying good practice and advocating for more effective policies and interventions that make healthier choices easier.

Education and prevention

Most people have a moderate level of risk, and a minority have a high level. Taken together, those at moderate risk contribute more to the total NCD burden than those at high risk. Consequently, a comprehensive NCD prevention and treatment strategy needs to blend an approach aimed at reducing risk factor levels in the population as a whole with another approach directed at high-risk individuals.

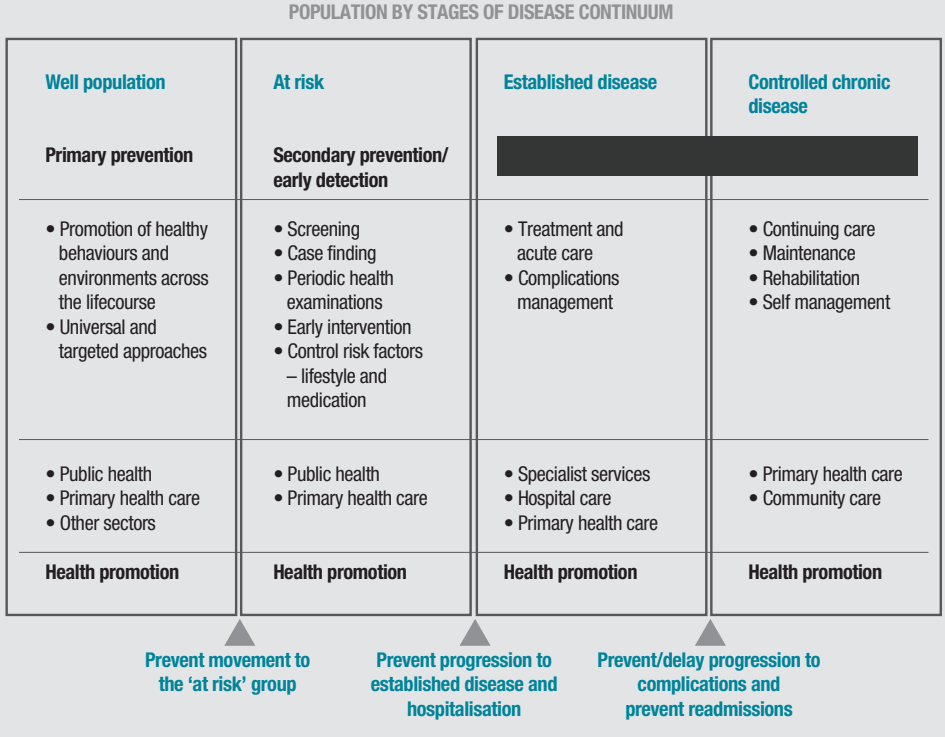
For hospitals and providers this means addressing the preventive, educational and behavioural needs of all patients as well as providing clinical services targeted at people with higher risk of disease or who already suffer from NCDs. More than two decades of health promotion development have resulted in a set of widely accepted principles and approaches, to be considered at all levels, that can assist hospitals and providers in helping patients avoid premature death and significantly reduce their disease burden from NCDs (see Figure 2). The objective here is to take action that addresses NCD risk factors, early detection, management, treatment and, importantly, the transitions between stages of what may be viewed as the "NCD patient journey" or disease continuum from wellness to self-managed and 'controlled' chronic disease realities.

Box 1: Essential elements of NCD disease management skills (Pruitt and Epping-Jordan, 2005)

- Shift from reactive to proactive care
- Negotiating individualized care plans with patients, taking into account their needs, values and preferences
- Supporting patients' efforts at self management
- Organizing and implementing group medical visits for patients who share common health problems
- Caring for a defined group of patients over time
- Working as a member of a multidisciplinary healthcare team
- Working in a community-based setting
- Designing and participating in quality improvement projects
- Developing information systems (for example, patient registries) and using available technology and communication systems to exchange information on patients
- Acquiring a 'population' perspective in addition to individualized care
- Developing a broad perspective of patient care across the continuum, from clinical prevention to palliative care
- Using evidence-based pathways of care

Source: Pruitt, S. and Epping-Jordan, J. (2005). Preparing the 21st century global healthcare workforce. BMJ 2005; 330 : 637 doi: 10.1136/bmj.330.7492.637 (Published 17 March 2005)

Figure 2: The 'NCD patient journey', a health promotion model



Source: National Public Health Partnership (2001). Preventing Chronic Disease: A Strategic Framework endorsed by the Australian Health Ministers' Advisory Council on 31 May 2001

Enhanced provider NCD healthy literacy

Educational leaders, health professional bodies and WHO recognize that training and care models that emphasize diagnosis and treatment of acute diseases are inadequate in addressing the prevention and disease management needs of people with chronic diseases that

persist across decades or lifetimes. Providers should be taught the essential elements of NCD disease management skills (see Box 1).

Making hospitals more health literacy friendly

There are a variety of health system interventions which have been shown to enhance the alignment of people's skills and capacities with system demands and needs. These include:

- **Provision of simplified/more attractive written materials:** Health information materials and official documents often use jargon and technical language that make them difficult to use (Rudd et al, 2000, cited in IOM, 2004). Patient information materials should be written with simplified language, have improved format, or use pictograms or other graphics (Doak, Doak & Root 1996).
- **Training of educators and providers:** Providers should be trained to communicate more effectively to help them care for patients with limited health literacy. Training should focus on improving clinician communication skills and understanding of cultural sensitivities (Frankel & Stein, 2001). Health professionals should use plain language and avoid using medical jargon (Paashe-Orlow et al, 2006). Furthermore, the clinicians need improved skills in fostering mutual learning, partnership-building, collaborative goal-setting and behaviour changing (Youmans & Schillinger, 2003). Training works best when it is informed by users with limited health literacy, who are often under-represented in clinical research (IOM, 2004).
- **Technology-based communication techniques:** At the Informal Interactive Civil Society Hearing on NCDs at the UN, held in June 2011, Sir George Alleyne, Director Emeritus of PAHO, stated, "There is a need for modern social marketing and information technology, the appropriate use of [mobile-health], and there is a need for a global forum to facilitate this interchange." New communication technologies offer opportunities that can help people to be more involved in their health decisions and treatment. These technologies include web-based learning, audio-visual aids, interactive games and 'mobile health' (m-health). M-health is a rapidly evolving communication area with enormous potential. Early results support its development as a most powerful interactive channel for health-related communications. Current uses for m-health communication include citizen science (providing researchers with data on risk promotion and behaviours), education and awareness, disease and epidemic outbreak tracking (providing decision-makers with timely, location-related information), patient diagnostic and treatment support, health care provider training and communications support, and remote patient data collection (Ratzan & Gilhooly, 2010).

Some researchers have begun developing tools to evaluate the health literacy friendliness of systems. For example, a 5-minute, 15-question, web-based survey collects information on whether health literacy is considered in programme development and service activities; the degree to which organizations follow health literacy principles in their programmes; whether organizations pilot test materials for comprehension or cultural competence; evaluation of materials; which activities people associate with health literacy; and lessons learned (Table 1).

Navigating health systems: Many health systems, particularly at institutional and community level, have tried to make their services more easily navigable by using case managers and navigators to help patients. Navigators can be community health workers, lay or professional, paid or volunteers, whose role is to help patients through the health or social care system. They can be trained to provide health education, interpret health information and assist in obtaining access to services (Freeman et al, 1995).

NCD investment scorecards/checklists: The NCD investment scorecards have been proposed as dynamic tools to raise public

Box 2: WHO 'best buys'

- Protecting people from tobacco smoke and banning smoking in public places;
- Warning about the dangers of tobacco use
- Enforcing bans on tobacco advertising, promotion and sponsorship
- Raising taxes on tobacco
- Restricting access to retailed alcohol
- Enforcing bans on alcohol advertising
- Raising taxes on alcohol
- Reduce salt intake and salt content of food
- Replacing trans-fat in food with polyunsaturated fat
- Promoting public awareness about diet and physical activity, including through mass media

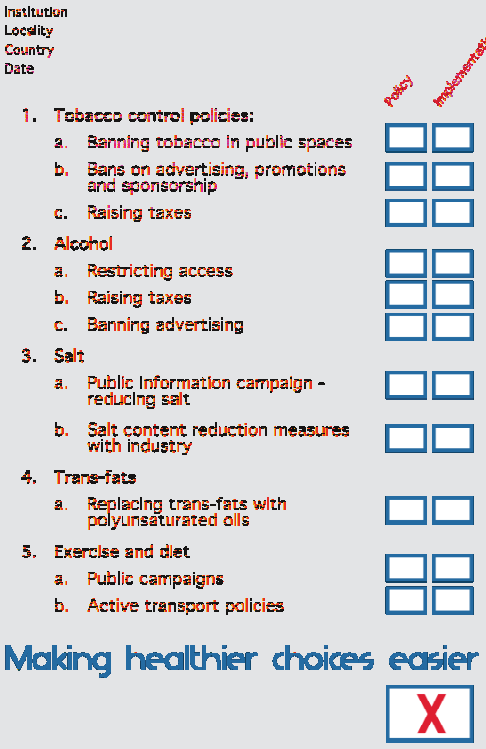
Source: WHO (2011). Global Status Report on noncommunicable diseases

Table 1: Frequency of undertaking health literacy-related activities

	Regularly	Sometimes	Do not do	Don't know	No response
Simplify language and check readability					
Reformat materials to make them more user-friendly					
Confirm patient/client understanding					
Train agency, staff, or health-care providers about health literacy					
Use audiovisual aids					
Provide materials in multiple languages					
Use pictographs, cartoons, etc. to instruct and inform					
Test for reading levels in clients					
Use interactive computer or kiosk					

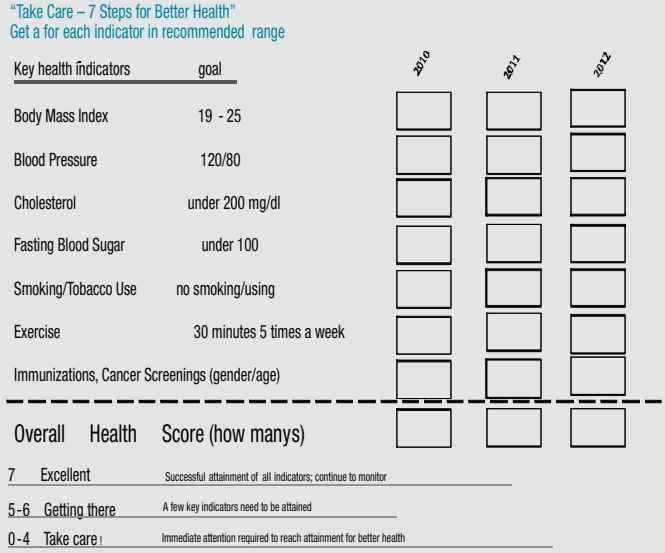
Source: Matthews and Sewell, 2002

Figure 3: System level scorecard



Source: Apfel, 2011

Figure 4: Individual NCD scorecard (adapted from Myron-Shatz, 2010)



Box 3: Benefits of the individual NCD investment health scorecard

Individual benefits

- ✚ A single number provides an easy means for people to keep track of their health (Message: 'Know your numbers')
- ✚ Establishing simple goal ranges (e.g. red, yellow, green) allows people to see how they rate compared to laboratory and community standards
- ✚ Including a range of medical/health indicators and behaviours helps people create a mental model of how lifestyle choices and NCDs are connected
- ✚ Having a scorecard that reflects 'risk' and 'preventability' can motivate action

System benefits

- ✚ Sequential ratings can serve as an incentive for improvement.
- ✚ A health scorecard, especially when it results in one number, allows anyone who is interested in monitoring and promoting health, and healthy behaviour – whether insurers, governments, agencies, pharmaceutical companies or global health organization officials – to keep track of health indicators at every level
- ✚ This will allow for detecting areas of either excellence or need.
- ✚ An agreed-upon and broadly disseminated health scorecard will allow different institutions or geographical areas to know their health ranking, both relative and absolute. This provides a benchmark and an incentive for improvement
- ✚ An agreed-upon and broadly disseminated health investment scorecard can be linked to a system level scorecard

Source: adapted from Myron-Shatz, 2010)

and policy-maker awareness and action related to making healthier choices easier.

Drawing on global NCD burden of disease, intervention impact and cost–benefit evidence (WHO, 2011), 5–10 key measurable risk-related actions would be identified. The idea of checklists or scorecards is not new. Multiple industries and fields have made great use of checklists that have saved lives (e.g. surgical checklists in hospitals, safety checklists in the airline and construction industry, etc.). The aim here is to find what the Institute of Medicine (2010) has called, "a uniform, parsimonious and handy way of measuring and promoting health."

The WHO Patient Safety Checklists are good examples. These are practical, easy-to-use tools that highlight critical actions to be taken at vulnerable moments of care. The 90-second surgery checklist is a one-page, 19-item checklist that can be used in low- and middle-income country facilities, and in understaffed or overstaffed hospitals that may be anywhere in the world including the latest state-of-the-art medical centres. The simple introduction and use of this list in an initial 3-month trial decreased infections by nearly 50%, deaths by 47% and major complications by 36%. These checklist interventions are developed in a format that health workers can refer to readily and repeatedly to ensure all essential actions are performed (Ratzan, 2010).

For NCD risk reduction, two scorecards – system and individual level—are envisaged. The system level scorecard would identify key policies, procedures and interventions (on national, regional, municipal, institutional or community levels) which agencies (countries, etc.) should take to make healthy NCD-related risk choices easier. Actions which maximize both health and economic gain would be selected. For example, the system level scorecard could draw on the WHO (2011) "best buy" recommendations for NCD interventions (see Box 2 and Figure 3).

Systems – national and community-based – would be given a score based on their policies and record in implementing these 'best buys'. People and policy-makers would be encouraged to advocate for the adoption and enforcement of these key interventions which would shape their environments in ways that

make healthier choices easier.

Such a scorecard is consistent with recommendations recently made by the NCD Alliance, proposing the delivery of five priority interventions – tobacco control, salt reduction, improved diets and physical activity, reduction in hazardous alcohol intake, and provision of essential drugs and technologies (Beaglehole et al, 2011). Succinct health and economic arguments (and case studies) for investment in these key actions would be provided.

On an individual level, scorecards (see Box 3) could help people track the impact of their choices. It could include clinical and behavioural measures, such as BMI, blood sugar, blood pressure and cholesterol levels, immunization status and behavioural measures related to smoking and exercise (see Figure 4), all of which could be linked to the system "best buys" and associated with best practice chronic disease prevention and control (Myron-Schatz, 2010).

Such individual scorecards have been found to be effective tools in a variety of global employee wellness and some disease-specific programmes. Hospitals should advocate for the use of both level scorecards to allow people to monitor their own health as well as the health of the community. Hospitals can be compared on the cumulative scores of their patient population scores and their institutional scores which reflect how well they help make healthier choices easier choices. ❑

Scott C Ratzan MD, MPA is Vice President, Global Health, Johnson & Johnson and Editor-In-Chief of the Journal of Health Communication: International Perspectives.

Dr Ratzan is the chair of the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) Non-Communicable Disease task force. He also co-chairs the United Nations Secretary General's Joint Action Plan on Women and Children's Health Innovation Working Group.

His books include the Mad Cow Crisis: Health and the Public Good, Attaining Global Health: Challenges and Opportunities, and AIDS: Effective Health Communication for the 90s.

He received his MD from the University of Southern California; MPA from the John F Kennedy School of Government, Harvard University; and MA (communication) from Emerson College.

Franklin Apfel is the Managing Director and founding partner of World Health Communication Associates Ltd. Previously, he has worked as Head of Communications for the WHO Regional Office for Europe (Copenhagen), as Primary Health Care Fellow of the King's Fund (London), as Regional Director for Central and Eastern Europe Project HOPE (Bratislava), and as a General Practitioner and Medical Director/CEO of California Health Leadership Inc. (Ukiah).

References

Asaria P et al (2007). Chronic disease prevention: health effects and financial costs of strategies to reduce salt intake and control tobacco use. *The Lancet*, 2007, 370:2044–2053.

Baker DW, Wolf MS, Feinglass J, Thompson JA, Gazmararian JA, Huang J (2007). Health Literacy and Mortality Among Elderly Persons. *Arch Intern Med.* 167(14):1503–1509.

Beaglehole R, Bonita R, Horton R, et al (2011). Priority actions for the non-communicable disease crisis. *The Lancet*, 377(9775):1438–1447.

Doak C, Doak L, and Rudd J (1996). *Teaching Patients with Low Literacy Skills*. Philadelphia: J.B. Lippincott Company.

Frankel RM & Stein T (2001). Getting the most out of the clinical encounter: The four habits model. *Journal of Medical Practice Management.* 16(4):184–191.

Freeman HP, Muth BJ & Kerner JF (1995). Expanding access to cancer screening and clinical follow-up among the medically underserved. Cancer Practice. 3(1):19-30.

Galobardes B, Costanza MC, Bernstein MS, Delhumeau C & Morabia A (2003). Trends in risk factors for lifestyle-related diseases by socioeconomic position in Geneva, Switzerland, 1993-2000: health inequalities persist. *American Journal of Public Health*, 93:1302–1309.

Healthy People 2010 (2000). US Department of Health and Human Services. http://www.healthypeople.gov/Document/html/uih/uih_bw/uih_2.htm.

Hernandez L. (2009). Measures of Health Literacy: Workshop Summary Roundtable on Health Literacy. Institute of Medicine. http://www.nap.edu/catalog/12690. html (accessed 10/01/2010).

Institute of Medicine (2010). Committee on Preventing the Global Epidemic of Cardiovascular Disease: Meeting the Challenges in Developing Countries.

Institute of Medicine (2004). Health Literacy: A Prescription to end Confusion. http://www.iom.edu/Reports/2004/Health-Literacy-A-Prescription-to-End-Confusion.aspx.

Kanjilal S, Gregg EW, Cheng YJ, Zhang P, Nelson DE, Mensah G & Beckles GL (2006). Socioeconomic status and trends in disparities in 4 major risk factors for cardiovascular disease among US adults, 1971–2002. Archives of Internal Medicine, 166:2348–2355.

Maio G, Manstead A, Verplanken B et al (2007). Lifestyle Change. Evidence Review. Foresight Tackling Obesities: Future Choices (http://www.foresight. gov.uk).

Matthews TL & Sewell JC (2002). State Official's Guide to Health Literacy. Lexington, KY:The Council of State Governments.

Miron-Shatz T (2010). White paper: The Potential of a Health Scorecard for Promoting Health Literacy. http://marketing.wharton.upenn.edu/people/faculty. cfm?id=358 (accessed 20/10/2010).

Paasche-Orlow MK, Schillinger D, Greene SM & Wagner EH (2006). How health care systems can begin to address the challenge of limited literacy. J Gen Intern Med. 21(8):884–887.

Pruitt S & Epping-Jordan J (2005). Preparing the 21st century global healthcare workforce. *BMJ* 2005; 330: 637 doi: 10.1136/bmj.330.7492.637 (Published 17 March 2005).

Ratzan S (2010). Chronic Disease: A Risk We Need to Score. *Journal of Health Communication*, 15:5,467–469. Available at http://dx.doi.org/10.1080/10810730.2010.495008.

Ratzan S & Gilhooly D (2010). Innovative Use of Mobile Phones and Related Information and Communication Technologies United Nations, p. 29. Background Paper for the Global Strategy for Women's and Children's Health: Investing in Our Common Future. New York. p.18–26.

Ratzan S (2011). Parsimony for Non-Communicable Disease Prevention: A Checklist. *Journal of Health Communication*, 16:455–457, 2011 DOI: 10.1080/10810730.2011.582828

Wolf MS, Gazmararian JA & Baker DW (2005). Health literacy and functional health status among older adults. *Arch Intern Med.* 165:1946–1952.

World Economic Forum (2009). Summit on Global Agenda 2009 Council Reports. http://www.weforum.org/pdf/globalagenda2010.pdf (accessed 15 November 2010).

World Health Organization (2009). Public Health Campaigns: getting the message across. Geneva.

WHO (2010). Background Document – Informal Dialogue with the Private Sector in the preparation of the UN High Level Meeting of the General Assembly on noncommunicable Diseases. Geneva.

World Health Organization (2011). *Global Status Report on noncommunicable diseases*, 2010. Geneva.

Youmans S & Schillinger D (2003). Functional Health Literacy and Medication Management: The Role of the Pharmacist. *Annals of Pharmacotherapy.* Vol 37. November, 2003.

Dispositional and situational factors as determinants of food eating behaviour among sedentary and blue-collar workers in Nigeria's premier teaching hospital

ADEBAYO O ADEJUMO,
DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF IBADAN, IBADAN, NIGERIA.

ABSTRACT: This cross-sectional survey investigated the role of dispositional (self-efficacy and self esteem), and situational factors (distractibility and perceived food variety) as determinants of food eating behaviour (FEB). Hospital employees (N500) in Nigeria's premier teaching Hospital participated. Results showed that self-efficacy and self-esteem jointly predicted cognitive restraint dimension of FEB ($F(2,499) = 26.00$; $R^2 = 0.10$; $p<.05$). Dispositional variables also jointly predicted uncontrolled eating ($F(2,499) = 17.41$; $R^2 = 0.07$; $p<.05$), emotional eating ($F(2,499) = 28.58$; $R^2 = 0.10$; $p<.05$), and cognitive restraint ($F(2,499) = 35.60$; $R^2 = 0.13$; $p<.05$) dimensions of FEB. Age ($x^2 = 64.81$; $df = 1$; $p<.05$), and marital status ($x^2 = 32.74$; $df = 4$; $p<.05$) were associated with FEB. Therefore, dispositional and situational variables are predictors of FEB as evidenced in previous literatures. The need for primary prevention, and assertiveness to reduce distractibility and eating disorders was highlighted towards maintaining health and efficiency at work is recommended.

Many chronic health problems are associated with modifiable lifestyle behaviours, such as poor dietary choices and physical inactivity (Food Today, 2010). Hospital workers, especially physicians, nurses, dieticians etc. are by virtue of their training and duty expected not only to have adequate knowledge about food choices and eating habits, but consistently show evidence of good eating behaviour to maintain health, and adequate energy for job efficiency. The extent to which health workers themselves adhere to healthy lifestyles deserve investigation. This study is therefore an empirical investigation into the psychological and demographic determinants of eating behaviour among health workers.

Food eating behaviour means the pattern by which an individual selects food items, the manner and how much is eaten over a period. It has three dimensions- cognitive restraint, uncontrolled eating, and emotional eating (Lauzon, Romon, Deschamps, Lafay, Borys, Karlsson, Ducimetiere, & Laventie, (2004). These dimensions of FEB have been related to both dispositional and contextual variables (Rolls, Castellanos, Halford, Kilara, & Panyam, (1998).

Dispositional variables such as self-efficacy, locus of control and self-esteem have been shown to have implication for food selection pattern (McCaul, Glasgow, & Schafer, 1987) but which of the variables are related to food selection remains controversial. There is literature evidence about the effect of situational variables in the prediction of food selection pattern (e.g., Fisher, Rolls, & Birch, 2003), but the situational antecedents of eating behaviour remains poorly understood. Similarly, little is known about the role of self esteem, age, job status, and marital status in FEB among blue and white collar workers in health care industries, hence the focus of this study.

Objectives:

This study is therefore to:

1. Determine whether dispositional variables (self-efficacy and self esteem) predict food eating behaviour (cognitive restraint, uncontrolled eating, and emotional eating).
2. Investigate whether situational variables (distractibility and perceived food variety) determine FEB.
3. Test the association between demographic factors (age, job status, and marital status) and FEB.
4. Explore any significant difference between sedentary and blue-collar workers on FEB.
5. Investigate the significant main or joint influence of dispositional and situational factors on uncontrolled eating dimension of FEB.

Method

The cross sectional survey examined contextual and environmental factors determining FEB. The study took place in Ibadan, Nigeria's third largest city with a population of 5.6 million in 2006 (Wikipedia, 2010). The University College Hospital (UCH), the country's premier teaching hospital was the setting. The

accidentally selected participants included blue-collar workers (N266), i.e. porters, drivers, and artisans; as well as a sedentary sample (N234), made up of administrators, physicians, laboratory staff and nurses with a mean age of 32.81 years.

Data was collected with the use of a 70–item self report questionnaire divided into five sections. The 10–item Section A tapped socio-demographic information including: age, marital status, BMI, etc. Section B contained the 7-item Bosscher and Smith (1998) self-efficacy scale. Section C of the questionnaire contained the 10–item Rosenberg self esteem scale. High score on the scale implies high level of self-esteem, vice versa (Rosenberg, 1965). The 15–item section D contained the Mindfulness Awareness Attention Scale (MAAS) developed by Brown and Ryan (2003) to measure distractibility levels. Section E was the perceived food variety scale (PFVS) developed for the study. Fifteen items were generated through a focus group discussion, literature review and suggestion of experts. An initial content analysis by experts led to deletion of 5 items. Psychometric analysis of the items included item analysis, confirmatory principal component analysis (PCA), and internal consistency analysis using Crombach alpha. Section F contained the Three-Factor Eating Questionnaire (TFEQ-R18) originally developed by Stunkard and Messick, (1985).

Following a review of the research protocol and questionnaire, the researcher obtained approval and letter of introduction to UCH authorities. Having established that the study met ethical standards, the hospital granted permission to carry out the study. Five hundred and sixty-five consenting prospective participants were reached and assessed before the questionnaires were given to them for completion. They were each given one week to complete the questionnaires. However, only 500 questionnaires were fully completed and retrievable, representing 88% response rate. Retrieved questionnaires were coded, and analysed using the SPSS statistical software.

As shown in Table 1, the dispositional variables (i.e. self-efficacy and self-esteem) were significant joint predictors of cognitive restraint dimension of FEB ($F(2,499) = 26.00$; $R^2 = 0.10$; $p<.05$), jointly accounting for 10% predictability of cognitive restraint dimension of FEB. Self-efficacy ($\beta = 0.19$; $p<.05$); and self-esteem ($b = 0.17$; $p<.05$) significantly independently predicted cognitive restraint dimension of FEB.

Table 2 shows that distractibility and perceived food variety significantly jointly predicted cognitive restraint dimension of FEB ($F(2,499) = 35.60$; $R^2 = 0.13$; $p<.05$). Furthermore, distractibility ($\beta = 0.17$; $p<.05$); and perceived food variety ($b = 0.23$; $p<.05$) significantly independently predicted cognitive restraint dimension of FEB. Situational variables significantly jointly predicted uncontrolled eating dimension of FEB among sedentary and blue-collar workers ($F(2,499) = 194.67$; $R2 = 0.44$; $p<.05$). Distractibility

Table 1: Table 1: Multiple regression analysis Table showing dispositional variables predicting cognitive restraint, uncontrolled eating, and emotional eating dimensions of FEB

Cognitive restraint	β	T	P	F	R^2	P
Self-efficacy	0.19	4.02	<.05	26.00	0.10	<.05
Self-esteem	0.17	3.45	<.05			
Uncontrolled eating						
Self-efficacy	0.26	5.40	<.05	17.41	0.07	<.05
Self-esteem	-0.02	-0.38	Ns			
Emotional Eating						
Self-efficacy	0.36	7.54	<.05	28.58	0.10	<.05
Self-esteem	-0.14	-3.00	<.05			

Table 2: Multiple regression analysis Table showing situational variables predicting cognitive restraint, uncontrolled eating, and emotional dimensions of FEB

Cognitive restraint	β	T	P	F	R^2	P
Distractibility	0.17	3.40	<.05	35.60	0.13	<.05
Perceived food variety	0.23	4.62	<.05			
Uncontrolled eating						
Distractibility	0.48	11.97	<.05	194.67	0.44	<.05
Perceived food variety	0.27	6.63	<.05			
Emotional Eating						
Distractibility	0.53	12.09	<.05	121.20	0.33	<.05
Perceived food variety	0.07	1.63	Ns			

Table 3: Chi-Square Table Showing the Relationship between Age, Job Status, Marital Status and FEB

Variables		Food eating behaviour		Total	Df	X^2	P
		Low	High				
Age	Younger	163: 75.8%	113: 39.6%	276: 55.2%	1	64.81	<0.05
	Older	52: 24.2%	172:60.4%	224: 44.8%			
Total		215:100%	285:100%	500: 100%			
Job status	Junior	83: 38.6%	89: 31.2%	172: 34.4%			
	Intermediate	86: 40.0%	110:38.6%	196: 39.2%	2	5.58	>0.05
	Senior	46: 21.4%	86: 30.2%	132: 26.4%			
Total		215:100%	285:100%	500: 100%			
Marital status	Single	141: 38.6%	134: 47.0%	275: 55.0%			
	Married	66: 30.7%	98: 34.4%	164: 32.8%			
	Widowed	-	19: 6.7%	19: 3.8%	4	32.74	<0.05
	Divorced	5: 2.3%	16: 5.6%	21: 4.2%			
	Separated	3: 1.4%	18: 6.3%	21: 4.2%			
Total		215:100%	285:100%	500: 100%			

(b = 0.48; p<.05); and perceived food variety (β = 0.27; p<.05) had significant main influence on uncontrolled eating dimension of FEB.

Table 3 shows that there was significant positive association between age and the three dimensions of FEB (x^2= 64.81; df = 1; p<.05). Marital status is also significantly associated with FEB (x^2= 32.74; df = 4; p<.05). However, job status had no significant association with FEB (x^2= 5.58; df = 2; p>.05).

The above Table shows that there was no significant effect of categories of workers on food eating behaviour (t = 0.75; df = 498; p > 0.05). Thus, sedentary workers did not differ significantly (x = 35.33) on FEB compared to blue-collar workers (x = 34.76).

Table 5 reveals that there was significant main effect of distractibility (F (1, 499) = 44.48; p<.05). perceived food variety (F(1, 499)= 30.40; p<.05), and self-efficacy (F(1, 499) = 17.36; p<.05) on uncontrolled eating. Self-esteem had no significant main effect on uncontrolled eating (F(1, 499) = 0.02; p >.0.05). There was a significant three-way interaction effect of distractibility, perceived food variety, and self-efficacy (F(1, 499)= 4.89; p<.05), on uncontrolled eating.

Table 4: Independent T-Test Table Comparing Sedentary and Blue-Collar Workers on FEB

Dependent variable	Categories of workers	N	X	SD	Df	T
Food eating behaviour	Sedentary Workers	234	35.33	7.86	498	0.75
	Blue-collar Workers	266	34.76	9.03		

Table 5: 2x2x2x2 ANOVA showing the main and interaction effects of distractibility, perceived food variety, self efficacy, and self esteem on uncontrolled eating dimension of FEB

Source	SS	Df	MS	F
Distractibility (A)	1378.30	1	1378.30	44.48
Food variety (B)	942.04	1	942.04	30.40
Self-efficacy (C)	537.97	1	537.97	17.36
Self-esteem (D)	0.51	1	0.51	0.02
A x B	187.47	1	187.47	6.05
A x C	425.84	1	425.84	13.74
A x D	43.35	1	43.35	1.40
B x C	236.67	1	236.67	7.64
B x D	243.53	1	243.53	7.86
C x D	120.61	1	120.61	3.89
A x B x C	151.57	1	151.57	4.89
A x B x D	6.18	1	6.18	0.01
B x C x D	8.31	1	8.31	0.27
A x B x C x D	16.28	1	16.28	0.53
Error	14998.00	484	30.99	
Total	**21842.80**	**499**		

Discussion

This study has established that self efficacy and self esteem are joint determinants of cognitive restraint, uncontrolled eating, and emotional eating, i.e. the three dimensions of food eating behaviour, but self esteem had no independent effect on uncontrolled eating. Additionally, distractibility; and perceived food variety were significant independent predictors of all the three dimensions of food eating behaviour, except that perceived food variety did not predict emotional eating. There was no significant difference between white and blue collar workers on food eating behaviour.

The discovery that self-efficacy and self-esteem significantly jointly and independently predicted cognitive restraint, uncontrolled eating, and emotional eating dimensions of food eating behaviour has also been supported in part by the findings of McCaul, Glasgow, and Schafer, (1987). This means that an individual's belief that s/he can perform a novel or difficult task, or cope with adversity - in various domains of human functioning could influence the three dimensions of an individual's food eating behaviour.

The finding indicating that situational variables; distractibility and perceived food variety independently predicted the three dimensions of food eating behaviour has been supported in part by the findings of Brunstrom and Mitchell, (2006), Bellisle and Dalix, (2001), as well as Kahn and Wansink (2004). The differences in the findings in this study compared to earlier literatures are two-fold. First, the study established that distractibility and perceived food variety could further jointly determine the three dimensions of food eating behaviour. Second, it established that perceived food variety does not significantly affect emotional eating.

Like any member of the society, health workers are also vulnerable to the influences of distractions such as internet browsing, electronic devices, and TV shows. Considering the potential occupational stress inherent in the healthcare professions, especially in a resource limited setting like Nigeria, many health workers make conscious efforts to engage the use of any of any of the devices mentioned above to relieve cushion intrinsic and extrinsic pressures, in an effort to prevent occupational burnout. Allowing distractions at meal time could significantly affect many aspects of eating behaviour unconsciously.

There was a significant association between age and food eating behaviour. In this study, older participants recorded higher scores on food eating behaviour compared to younger participants. This suggests that health workers beyond the mean age i.e. 32.81 years, are more likely to have greater cognitive restraint, uncontrolled eating, and emotional eating respectively. It is necessary to consider the possible extraneous influence of youthful exuberance, explorative behaviour, pseudo-infallibility, and lesser experience on the attitude and behaviours of younger people. However, neither job status, nor category at work (white or blue collar) predicted food eating behaviour in this study.

Married participants reported highest scores in food eating behaviour compared to participants with other marital statuses. This may be connected to the higher level of social support available in marriage. But marital status did not predict food eating behaviour in the study.

Conclusion

These suggest that the training of many physicians, nurses, and other health workers even at the premier and foremost health institution have not significantly discriminated them from less skilled staff in the area of food selection, and consumption

behaviours. Training and experience are expected to translate into safe health practices.

Unguarded food choices could lead to chronic health problems (*Food Today,* 2010). A pragmatic programme of health risk and impact assessment, self-efficacy and assertiveness to reduce distractibility and eating disorders among healthcare workers would mitigate the risks associated with unsafe eating behaviour among health workers, and by so doing assure the health of the nation. ❑

Adebayo Adejumo taught and practiced perioperative nursing from 1989. He holds an MSc and PhD in Clinical and Developmental Psychology, and currently lectures in Psychology at the University of Ibadan, Nigeria. He obtained an MHSc Bioethics degree of the University of Toronto with research interest in health psychology and bioethics.

References

Bellisle, F., & Dalix A. M. (2001). Cognitive restraint can be offset by distraction, leading to increased meal intake in women. *American Journal of Clinical Nutrition.* 74:197–200.

Bosscher, J., & Smith, J.H. (1998). Confirmatory factor analysis of the general self efficacy scale. *Behavior Research and Therapy*, 36, 339-343.

Brown, K.W., & Ryan, R.M. (2003). The benefits of being present: The role of mindfulness in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.

Brunstrom, J.M., & Mitchell, G. L. (2006). Effects of distraction on the development of satiety. British Journal of Nutrition, 96, 761–769 DOI: 10.1079/BJN20061880.

Fisher, J.O., Rolls, B.J., & Birch, L.L. (2003). Children's bite size and intake of an entrée are greater with large portions than with age-appropriate or self-selected portions. *American Journal of Clinical. Nutrition*, 77, 1164–70.

Food Today (2010) Motivating Change: Tips for Health care professionals. http://www.eufic.org/article/en/artid/Motivating-change-Tips-for-health-care-professionals.

Kahn, B.E., & Wansink, B. (2004). The influence of assortment structure on perceived variety and consumption quantities. *Journal of Consumer Research,* 30, 519–33.

Lauzon, et al (2004). The Three Factor Eating Questionnaire R18 is Able to Distinguish among Different eating Patterns in a General Population. *The Journal of Nutrition*, 134: 2372-2380.

McCaul, K.D., Glasgow, R.E., & Schafer, L.C. (1987). Diabetes Regimen Behaviors: Predicting Adherence. *Medical Care*, 25, 868-881.

Rosenberg, M. (1965). *Society and the adolescent self image.* Princeton, NJ: Princeton University Press.

Rolls, B.J., Castellanos, V.H., Halford, J.C., Kilara, A., & Panyam, D. (1998). Volume of food consumed affects satiety in men. *Ameircan journal of Clinical Nutrition*, 67, 1170–77.

Stunkard, A.J. & Messick, S. (1985). The Three- Factor Eating Questionnaire to measure dietary restraint, dis-inhibition and hunger. *Journal of Psychosomatic Research*, 29, 71-83.

Wikipedia (2010). Oyo State. Retrieved from http://www.oyostate.gov.ng/about-oyo/brief-overview. Downloaded on September 10, 2010.

Comparative analysis of the quality of life in home and hospital treatment of patients suffering from heart failure

T Y VEKOV
CHAIRMAN OF THE BOARD OF DIRECTORS, THE BULGARIAN CARDIAC INSTITUTE

H HRISTOV
ADMINISTRATIVE DIRECTOR, SPECIALIZED CARDIAC HOSPITAL FOR ACTIVE TREATMENT IN CARDIOLOGY, PLEVEN

I MAZNEV
MEDICAL DIRECTOR, SPECIALIZED CARDIAC HOSPITAL FOR ACTIVE TREATMENT IN CARDIOLOGY, PLEVEN

ABSTRACT: This article presents an analytical examination of the results of the survey conducted by the specialized cardiac hospital for active treatment Pleven, which focused on the quality of life, hospital admission and death rate of patients suffering from heart failure that have already received hospital treatment. Given the specifics of the survey, patients were divided into two groups, one of which received ongoing follow-up care at home, while the other group did not receive this additional service. After twelve months, the results of the two groups were computed and collated according to three criteria – quality of life, subsequent hospital admission and death rate. The reported results of the group receiving ongoing specialized care were better in all three criteria. Based on this, the authors conclude that patients with treated heart failure should receive follow-up care after they have been discharged, as this increases their quality of life and leads to fewer subsequent hospital admissions and death rates.

The constantly decreasing resources in the public sector in recent years, the ageing population and the weak economic growth in many European Union (EU) countries target public impact on the effectiveness and efficiency of the public sector and in particular on healthcare. These factors provoke serious activity towards the establishment of appropriate methods and techniques for analysis of the volume and structure of healthcare costs, the effectiveness of the expenditure policies on target groups or society as a whole as well as the link between the inputs and the outputs of the system.[1,2,6,7,8]

A basic method for increasing the quality of healthcare and decreasing the death rate and excess hospital admissions is monitoring and treatment of chronic diseases (e.g. heart failure) in outpatient care.[1,2,3,4,5] This contemporary trend of health care system development allows us to conduct a comparative survey, focusing on the effectiveness and efficiency of the treatment of heart failure at home and in hospital care. The survey was conducted by the Specialized Cardiac Hospital for Active Treatment in Cardiology Pleven among 85 patients suffering from heart failure – NYHA functional class III – IV. All patients were initially treated in hospital care following the requirements of the medical standards for treatment of heart failure. After discharge the patients were divided into two groups – 43 patients received follow-up care at home and 42 patients were observed without

Table 1: Clinical characteristics of the 85 studied patients suffering from heart failure at the time of their initial hospital admission

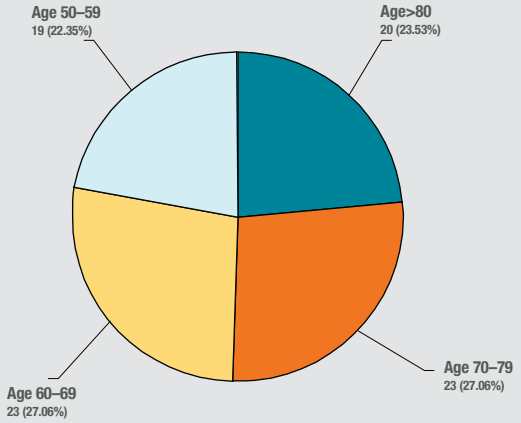
Parameters	Group I - patients,who received follow-up care at home (43)	Group II - patients, with no home monitoring and training provided (42)	P
Average systolic blood pressure (mmHg)	150 ± 27.5	145 ± 22.5	P < 0.01
Average diastolic blood pressure (mmHg)	94 ± 9.0	97 ± 8.5	P < 0.01
NYHA class III (%)	100% (43)	88.10% (37)	P < 0.01
NYHA class IV (%)		11.90% (5)	
Diabetes mellitus type II (%)	34.88% (15)	33.33% (14)	P < 0.09
Atrial fibrillation (%)	67.44% (29)	57.14% (24)	P < 0.07
COPD (%)	23.26% (10)	35.71% (15)	P < 0.11
LV systolic dysfunction (%)	72.09% (31)	78.57% (33)	P < 0.05
NT-pro BNP < 500 pg/ml (%)	13.95% (6)	16.67% (7)	P < 0.03
101 pg/ml < NT-pro BNP < 500 pg/ml (%)	37.21% (16)	40.48% (17)	P < 0.80
NT-pro BNP > 500 pg/ml (%)	48.84% (21)	42.86% (18)	P < 0.04

receiving any additional interventions. The first group received ongoing follow-up treatment at home and monitoring of the disease including monthly interviews, consultation over the telephone and home visits once every nine weeks all provided by a trained nurse, as well as a home visit by a cardiologist every six months. The second control group does not receive the additional ongoing follow-up treatment and consultations. Aside from the registered occasional hospital admissions due to acute heart failure, a telephone interview was conducted at the end of the one year period, as to clarify the conditions and complete the Minnesota Living with Heart Failure questionnaire that helps estimate the individual's quality of life.

The comparative analysis of the results of both groups is discussed in terms of number of hospital admissions, cost for one year of treatment, quality of life and mortality.

The distribution of the studied patients is shown in Figure 1.

Figure 1: Age distribution of 85 patients suffering from heart failure



Among the studied patients 55.29% (47) of them were male, while 44.71% (38) were female. The clinical characteristics of the patients in the studied test groups at the time of their inclusion in the survey are shown in Table 1.

The average arterial blood pressure estimated at hospital admission of the patients in both groups, respectively, was: systolic blood pressure – 150 ± 27.5 mmHg and 145 ± 22.5 mmHg and diastolic blood pressure - 94 ± 9.0 mmHg and 97 ± 8.5 mmHg. The measured average heart rate for both groups was 74.28 ± 10.5 bpm. Normal values of the arterial blood pressure were detected in 28.24% (24) of the patients, while there was no evidence of already diagnosed hypertension in 7.06% (6) of the patients. The average duration of arterial hypertension was 10.7 ± 4.5 years. After examination of the specialized history of cardiovascular diseases, data from ECG and echocardiography, ischemic heart disease was diagnosed in 61.18% (52) of the patients. In 43.53% of the cases was detected a previous myocardial infarction, 81.08% (30) of which were with ST-elevation. Permanent atrial fibrillation was recorded in the ECG data of 61.18% (52) of the patients, while in 75.29% (64) was established left ventricular systolic dysfunction. In 34.12% (29) of the patients was established a registered concomitant disease type II diabetes, while in 41.38% (12) of them were found abnormally high serum glucose levels at the time of hospital admission. The serum lipid levels were higher than normal in 63.53% (54) of the patients, whereas in 35,19% (19) of them was reported mixed dyslipidemia, in 50.0% (27) – significant hypercholesterolemia and in 14.81% (8) – hypertriglyceridemia. 94.12% (80) of the admitted patients showed clinical signs of

Table 2: Minnesota Living with Heart Failure questionnaire quality of life estimation of 43 patients suffering from heart failure

	Question – Did your heart failure prevent you from living as you wanted during the last month by:											
	no		very little								very much	
	0		1		2		3		4		5	
	I month	XII month	I month	XII month	I month	XII month	I month	XII month	I month	XII month	I month	XII month
1. causing swelling in your ankles or legs? (No. of patients/%)	4 (9.30%)	10 (23.26%)	10 (23.26%)	12 (27.91%)	18 (41.86%)	15 (34.88%)	10 (23.26%)	6 (13.95%)				
2. making you sit or lie down to rest during the day? (No. of patients /%)				5 (11.63%)	8 (18.61%)	10 (23.26%)	35 (81.40%)	28 (65.12%)-				
3. making your walking about or climbing stairs difficult? (No. of patients /%)			4 (9.30%)	2 (4.65%)		6 (13.95%)	31 (72.09%)	27 (62.79%)	3 (6.98%)	9 (20.93%)	4 (9.30%)	
4. making your working around the house difficult? (No. of patients /%)	6 (13.95%)	8 (18.61%)		7 (16.28%)	13 (30.23%)	15 (34.88%)	24 (55.81%)	18 (41.86%)				
5. making your going places away from home difficult? (No. of patients /%)	12 (27.9%)	14 (3256%)		10 (23.26%)	12 (27.91%)	11 (25.58%)	13 (30.23%)	7 (16.28%)	5 (11.63%)			
6. making your sleeping well at night difficult? (No. of patients /%)	13 (30.23%)	13 (30.23%)		8 (18.61%)	14 (32.56%)	10 (23.26%)	7 (16.28%)	9 (20.93%)	8 (18.61%)	3 (6.98%)		
7. making your relating to or doing things with your friends or family difficult? (No. of patients /%)	28 (65.12%)	30 (69.77%)	5 (11.63%)	8 (18.61%)	10 (23.26%)	5 (11.63%)	9 (20.93%)					
8. making your working to earn a living difficult? (No. of patients /%)	24 (55.81%)	27 (62.79%)		12 (27.91%)	10 (23.26%)	5 (11.63%)	9 (20.93%)					
9. making your recreational pastimes, sports, or hobbies difficult? (No. of patients /%)	4 (9.30%)	6 (13.95%)	11 (25.58%)	13 (30.23%)	12 (27.91%)	15 (34.88%)	10 (23.26%)	5 (11.63%)	6 (13.95%)	4 (9.30%)		
10. making your sexual activities difficult? (No. of patients /%)		2 (4.65%)	11 (25.58%)	8 (18.61%)	6 (13.95%)	7 (16.28%)	6 (13.95%)	8 (18.61%)	6 (13.95%)	4 (9.30%)	15 (34.88%)	12 (27.91%)
11. making you eat less of the foods you like? (No. of patients /%)	40 (93.02%)	40 (93.02%)	2 (4.65%)	2 (4.65%)	2 (4.65%)	1 (2.32%)						

Table 2: Minnesota Living with Heart Failure questionnaire quality of life estimation of 43 patients suffering from heart failure (continued)

12. making you short of breath? (No. of patients /%)	2 (4.65%)	1 (2.32%)		3 (6.98%)	2 (4.65%)	4 (9.30%)	28 (65.12%)	27 (62.79%)	12 (27.91%)	8 (18.61%)		
13. making you tired, fatigued, or low on energy? (No. of patients /%)			2 (4.65%)	3 (6.98%)	12 (27.91%)	15 (34.88%)	28 (65.12%)	24 (55.81%)			2 (4.65%)	1 (2.32%)
14. making you stay in a hospital? (No. of patients /%)	40 (93.02%)	40 (93.02%)	2 (4.65%)	3 (6.98%)	2 (4.65%)			2 (4.65%)				
15. increasing your costs for medical care? (No. of patients /%)			8 (18.61%)	3 (6.98%)	11 (25.58%)	14 (32.56%)	24 (55.81%)	24 (55.81%)			1 (2.32%)	
16. giving you side effects from medications? (No. of patients /%)	40 (93.02%)	36 (83.27%)		5 (11.63%)	1 (2.32%)	2 (4.65%)	2 (4.65%)					
17. making you feel you are a burden to your family and friends? (No. of patients /%)	41 (95.35%)	40 (93.02%)	2 (4.65%)	3 (6.98%)		1 (2.32%)						
18. making you lose self-control? (No. of patients /%)	43 (100.0%)	11 (25.58%)		2 (4.65%)								
19. making you worry? (No. of patients /%)	43 (100.0%)	43 (100.0%)										
20. making it difficult for you to concentrate or remember things? (No. of patients /%)	43 (100.0%)	43 (100.0%)										
21. making you feel depressed? (No. of patients /%)	41 (95.35%)	41 (95.35%)	2 (4.65%)	2 (4.65%)								
Sum of responses in the respective month	424 (46.95%)	435 (48.77%)	59 (6.53%)	111 (12.29%)	133 (14.73%)	136 (15.06%)	236 (26.14%)	185 (20.49%)	40 (4.43%)	28 (3.10 %)	22 (2.44%)1	3 (1.44%)

NYHA class III heart failure and 5.88% (5) – of NYHA class IV heart failure. Treatment with angiotensin converting enzyme (ACE) inhibitors or with angiotensin receptor blockers (ARBs) was assigned in 65.88% (56) of the patients suffering from heart failure, beta-blockers in 30.59% (26) of the patients and diuretics – in 90,59% (77).

Of the patients suffering from NYHA class III heart failure, 16.25% (13) had NT-pro BNP levels < 100 pg/ml, 38.75% (31) had levels between 101 and 500 pg/ml, and 45.0% (36) had NT-pro BNP levels > 500 pg/ml.

After discharge, the interventional group of patients received follow-up treatment and monitoring at home for a period of one year including medical assistance, training and consultation at home – every month a telephone interview was conducted by a nurse and the Minnesota Living with Heart Failure questionnaire for quality of life was completed; every ten weeks the nurse conducted home visits including registration of pulse, weight, temperature, arterial blood pressure, diuresis, breathing, as well as performing a six-minute walk test and monitoring the medication treatment. Every six months a cardiac examination was performed by a specialist including ECG and echocardiography. The second group of patients did not receive any care at home, whereas at the end of the one-year period a telephone interview was conducted including estimation of hospital admissions during that time, quality of life (Minnesota Living with Heart Failure questionnaire) and mortality. The results of the estimated quality of life at the beginning and end of the period for the first group of patients, which received monitoring at home, are shown in Table 2.

The deliberate use of analogical or very similar questions in this survey aims to eliminate false subjective responses of the participants. Significant change in the general perception of the quality of life improvement is observed only in the first column ("very little"), where the sum of responses regarding the small impact of heart failure increases from 59 (6.53%) to 111 (12.29%),

Table 3: Consistency of treatment in 43 patients suffering from heart failure based on EHFScBS[i]

Procedure	VI month	XII month	P
1. I weigh myself every day	24 (55.81%)	28 (65.12%)	P < 0.04
2. If I get shortness of breath, I take it easy	27 (62.79%)	29 (67.44%)	P < 0.48
3. If shortness of breath increases, I contact my doctor or nurse	22 (51.16%)	28 (65.12%)	P < 0.01
4. If legs/feet are more swollen, I contact a hospital, doctor or nurse	25 (58.13%)	27 (62.79%)	P < 0.75
5. If I gain 2 kg in a week, I contact a hospital, doctor or nurse	12 (27.91%)	18 (41.86%)	P < 0.02
6. I limit the amount of fluids I take (< 1.5 l per day)	8 (18.61%)	16 (37.21%)	P < 0.01
7. I take a rest during the day	32 (74.42%)	35 (81.40%)	P < 0.56
8. If I experience fatigue, I contact a hospital, doctor or nurse.	26 (60.47%)	29 (67.44%)	P < 0.10
9. I eat a low salt diet	18 (41.86%)	29 (67.44%)	P < 0.02
10. I take my medication as prescribed	39 (90.70%)	38 (88.37%)	P < 0.75
11. I get a flu shot every year	22 (51.16%)	23 (53.49%)	P < 0.90
12. I exercise regularly	15 (34.88%)	16 (37.21%)	P < 0.70
Total	**270 (52.33%)**	**316 (61.24%)**	**P < 0.05**

[i] EHFScBS – European Heart Failure Self-care Behavior Scale

Table 4: Quality of life estimation of 42 patients suffering from heart failure one year after their initial hospital admission

Question – Did your heart failure prevent you from living as you wanted during the last month by:	no	very little				very much
	0	**1**	**2**	**3**	**4**	**5**
1. causing swelling in your ankles or legs? (No. of patients/%)	4 (9.30%)	9 (21.43%)	10 (23.81%)	13 (30.95%)	6 (14.28%)	
2. making you sit or lie down to rest during the day? (No. of patients /%)			10 (23.81%)	11 (26.19%)	16 (30.09%)	4 (9.52%)
3. making your walking about or climbing stairs difficult? (No. of patients /%)		6 (14.28%)	8 (19.04%)	9 (21.43%)	13 (30.95%	)6 (14.28%)
4. making your working around the house difficult? (No. of patients /%)		1 (2.38%)	9 (21.43%)	19 (45.24%)	13 (30.95%)	
5. making your going places away from home difficult? (No. of patients /%)		4 (9.52%)	14 (33.33%)	15 (35.72%)	9 (21.43%)	
6. making your sleeping well at night difficult? (No. of patients /%)	6 (14.28%)	8 (19.04%)	10 (23.81%)	13 (30.95%)	5 (11.90%)	
7. making your relating to or doing things with your friends or family difficult? (No. of patients /%)	18 (42.86%)	3 (7.14%)	14 (39.33%)	7 (16.67%)		
8. making your working to earn a living difficult? (No. of patients /%)	17 (40.48%)	15 (35.71%)	8 (19.08%	2 (4.76%)		
9. making your recreational pastimes, sports, or hobbies difficult? (No. of patients /%)		15 (35.71%)	8 (19.08%)	9 (21.43%)	8 (19.08%)	2 (4.76%)
10. making your sexual activities difficult? (No. of patients /%)		2 (4.76%)	3 (7.14%)	6 (24.29%)	12 (28.57%)	19 (45.24%)
11. making you eat less of the foods you like? (No. of patients /%)	30 (71.43%)	8 (19.08%)	4 (9.52%)			
12. making you short of breath? (No. of patients /%)		1 (2.38%)	5 (11.91%)	21 (50.00%)	9 (21.43%)	6 (14.29%)
13. making you tired, fatigued, or low on energy? (No. of patients /%)		4 (9.52%)	14 (39.33%)	16 (38.09%)	7 (16.67%)	1 (2.38%)
14. making you stay in a hospital? (No. of patients /%)	8 (19.08%)	16 (38.09%)	10 (23.81)	5 (11.91%)	3 (7.14%)	
15. increasing your costs for medical care? (No. of patients /%)	1 (2.38%)	5 (11.91%)	8 (19.08%)	12 (28.57%)	16 (38.09%)	
16. giving you side effects from medications? (No. of patients /%)	37 (88.10%)	3 (7.14%)	2 (4.76%)			
17. making you feel you are a burden to your family and friends? (No. of patients /%)	38 (90.48%)	3 (7.14%)	2 (4.76%)			
18. making you lose self-control? (No. of patients /%)	42 (100.00%)					
19. making you worry? (No. of patients /%)	41 (97.62%)	1 (2.38%)				
20. making it difficult for you to concentrate or remember things? (No. of patients /%)	42 (100.00%)					
21. making you feel depressed?(No. of patients /%)	41 (97.62%)	1 (2.38%)				
Sum of responses in the respective month	**325 (36.85%)**	**105 (11.91%)**	**139 (15.76%)**	**158 (17.91%)**	**117 (13.27%)**	**38 (4.31%)**

while the responses in the third column regarding the strong negative impact of the disease decrease from 236 (26.14%) at the beginning to 185 (20.49%) at the end of the period. Therefore, it can be concluded that there is an improvement of the quality of life and patient satisfaction in the group which received follow-up monitoring and treatment at home. The basic everyday problems described by the patients include climbing stairs, walking, difficulties in the sexual activity, shortness of breath and tendency to be fatigued easily. In patients who received follow-up monitoring at home there were virtually no family, mental health or nutrition problems reported.

In order to establish the proper consistency of treatment at home and improve disease control, our team also conducted a survey on following the lifestyle principles and monitoring, for which the patients received training during home visits.

Clearly there is a proportional relationship between training and consistency of treatment at home - for the period of 12 months the level of consistency in home treatment increased from 52.33% to 61.24% in 43 patients. The biggest improvement is registered for consistency indicators such as weighing oneself every day, consulting a doctor when shortness of breath increases, consulting a specialist when weight is gained or limiting the amount of fluid and salt intake.

Proper treatment at home requires skills in following a behavior routine as well as in making decisions when it comes to signs and symptoms. Home treatment skills can be divided into two types – tactical skills that relate to the planning and specific skills that most often relate to diet, titration of diuretics and exercise. In the course of home training it was established that it is much easier for the patients to acquire specific skills rather than tactical ones.

The second control group of 42 patients suffering from heart failure received no follow-up treatment and training at home and at

the end of the one year period a telephone interview was conducted with each patient in order to estimate the individual's quality of life – see Table 4.

Significant differences ($P < 0.05$) in the general perception of the quality of life are observed only in responses 4-5 concerning the strong negative impact of heart failure. After conducting telephone interviews with the patients who received no follow-up monitoring at home during the time of the randomized controlled clinical trial, 70 hospital admissions were recorded (an average of 1.67 per patient per year), of which 28 (40.0%) were cardiac hospital admissions and 3 (7.14%) were registered deaths over a period of one year.

Respectively, in the interventional group of 43 patients that received home monitoring, the following data was recorded – 48 hospital admissions (an average of 1.1 per patient per year), of which 17 (35.42%) were cardiac hospital admissions and 2 (4.65%) were registered deaths over a period of one year.

Conclusion

The comparative analysis of the two groups of patients suffering from heart failure showed an improvement of the studied criteria (quality of life, hospital admissions and mortality) in the group with additional home monitoring, treatment and training. ❑

Mr Toni Vekov DM, is an associate professor of Social Medicine at the Pleven University, Bulgaria. He acquired his Doctoral degree in Social Medicine from the Medical University in Sofia in 2008. For the past 5 years Mr. Vekov has delivered over 50 thematic lectures about healthcare across Bulgaria.

Bibliography

1. De Busk R., Miller N., Parker K., Bandura A., et al., Care management for low-risk patients with heart failure: a randomized, controlled trial, *Ann Intern Med*, 2004, 141, 606-613
2. Jaarsma T., Van der Wal M., Lesman – Leegte I., et al., Effect of moderate or intensive disease management program on outcome in patients with heart failure: coordinating study evaluating outcomes of advising and counseling in heart failure, *Arch Intern Med*, 2008, 168, 316-324
3. Kato N., Ito N., Kinugawa K., et al., Validity and reliability of the Japanese version of the European Heart Failure Self – Care Behavior Scale, *Eur J Cariovasc Nurs*, 2008, 7, 284-289
4. Mc Alister F., Steward S., Ferrua S., Mc Murray J., Miltidisciplinary strategies for the management of heart failure patientas at high risk for admission a systematic review of randomized trials, *J Am Coll Cardiol*, 2004, 44, 810-819
5. Rutledge T., Reis V., Linke S., et al., Depression in heart failure a meta-analytic review of prevalence, intervention effects and associations with clinical outcomes, *J Am Coll Cardiol*, 2006, 48, 1527-1537
6. Stromberg A., Patient – related factors of compliance in heart failure: some new insights into an old problem, *Eur Heart J*, 2006, 27, 379-381
7. Van der Wal M., Jaarsma T., Moser D., et al., Compliance in heart failure patients: the importance of knowledge and beliefs, *Eur Heart J*, 2006, 27, 434-440
8. Van der Wal M., Jaarsma T., Van Veldhuisen D., Non – compliance in patients with heart failure; how can we manage it?, *Eur J Heart Fail*, 2005, 7. 5-17

Perceptions and experiences of co-delivery model for self-management training for clinicians working with patients with long-term conditions at three healthcare economies in UK

SHILPI SHARMA
RESEARCH ASSISTANT AT ARC-HLI DEPARTMENT, COVENTRY UNIVERSITY

PROFESSOR LOUISE M WALLACE
RESEARCH PROFESSOR OF PSYCHOLOGY AND HEALTH AT COVENTRY UNIVERSITY

DR JOANNA KOSMALA-ANDERSON
RESEARCH FELLOW AT THE APPLIED RESEARCH CENTRE OF HEALTH AND LIFESTYLE INTERVENTIONS AT COVENTRY UNIVERSITY

ALBA REALPE, PhD STUDENT
SECOND YEAR PHD CANDIDATE UNDER THE SUPERVISION OF PROFESSOR WALLACE AT COVENTRY UNIVERSITY

DR ANDY TURNER
SENIOR RESEARCH FELLOW AT THE APPLIED RESEARCH CENTRE OF HEALTH AND LIFESTYLE INTERVENTIONS, BASED AT COVENTRY UNIVERSITY

ABSTRACT: This paper presents a case study evaluation of self-management training courses for clinicians working with patients with COPD and Depression, at three NHS sites in United Kingdom. These courses were part of the Health Foundation's Co-Creating Health Initiative project and were co-delivered by a trained patient and clinician tutors. Interviews with 30 clinician attendees, four clinician tutors and two patient tutors suggested that the course content and delivery style were valued by everyone and clinicians reported a higher use of self-management skills following training. Analyses of the video-recorded consultation sessions of two trained clinicians showed limited use of co-production skills.

We present a case study of how three health care economies, including primary and secondary care services for people with a long term condition (LTC), have implemented training to enable clinicians to support self management. The training intervention is part of The Health Foundation's Co-creating Health (CCH) Initiative. The CCH is a quality improvement demonstration programme which focuses on adults with the long-term health conditions (LTCs) of diabetes, COPD, musculo-skeletal pain and depression and the clinicians and healthcare services that they interface with, acknowledging that for people with long term conditions to take a more active role in their health, patients need to develop the knowledge and skills to manage their condition while working in effective partnership with their clinicians. This include problem-solving and action planning, which aim to help people increase their confidence and self management skills.

Eight different NHS sites in the UK were involved in the CCH Programme, combining primary and secondary health care in each locality (http://www.health.org.uk/areas-of-work/improvement-programmes/co-creating-health/)

Theoretical background to CCH initiative

The prevailing model of public service delivery tends to highlight that power, skills and knowledge are possessed by providers and users are put in the role of passive recipients, which unwittingly ignores patients' capacities for engagement in decisions about coping with their condition and lifestyle (Boyle, Coote, Sherwood & Slay, 2010). This might also make service users ever more dependent on service providers (Marmot, 2010). A more active and involved role of patients in the management of their disease is essential to health care systems (Coulter and Ellins, 2006). The provision of services which encourage provision of self management support (SMS) is also part of the drive to reduce cost and improve outcomes by the Department of Health (Department of Health, 2009). SMS training may facilitate less dependency on clinical services as well as improvement in health outcomes in the longer term (Brownson, Miller, Crespo, Neuner, et al., 2007; Lorig, Sobel, Stewart, Brown, 1999). There is a considerable research

literature that supports the effectiveness of clinician lead, as well as lay-lead approaches to self management. Lay led SMS training programs were shown to result in reductions in the intensity of symptoms, reduced GP visits and an increase in patients' confidence for managing their condition (Kennedy, Gask, & Rogers, 2005).

There are numerous approaches to training clinicians to conduct effective diagnostic interviews, to be more patient centred and to motivate patients to change specific unhealthy "habits" such as smoking- for example employing motivational interviewing skills (Rollnick, Kinnersley, & Stott, 1993). These however do not address the particular skill set required for consultations for people with a LTC (Realpe & Wallace, 2010). This is because people with a LTC are likely to have many contacts with a diverse range of clinicians in different services as they face different choices and challenges over many years related to their LTCs. Therefore, for clinicians to be effective in supporting patients to self manage new models of consultation are required.

The co-production model describes an equal collboration between service users and providers in a way that uses the patient's experience of living with a LTC in designing and delivery of services (Boyle, et al., 2010). It emphasises an equal partnership between service providers and users in a way that service users are encouraged to engage in the decision making process about their own illness, but with expert support from the clinician. This is expected to enable effective knowledge transfer and shared decision making resulting in better health outcomes (Epping-Jordan, Pruitt, Bengoa, Wagner, 2004; Hibbard, Collins, & Baker, 2008; Needham & Carr, 2009). This model requires a shift in clinician consultation style and skills from the traditional approach whereby, clinicians dictate the course of treatment for patients to follow, to a shared partnership between patients and clinicians (Coulter & Ellins, 2006).

Although previous research has suggested what skills might be essential to enable clinicians to perform such a role, there are few empirical studies to test how such skills are best learnt, practiced and sustained through the use of a co-production model (Realpe & Wallace, 2010). In an attempt to address this gap in the health care system, an Advanced Clinician Development Programme (ADP) was designed and implemented as part of the CCH initative.

The Advanced Development Programme component of the CCH initiative

The Advanced Development Clinician Programme (ADP), developed and delivered by the Client Focused Evaluations Programme (CFEP), is designed for all members of clinical teams working with patients with LTCs (including doctors, physiotherapists, dieticians, nurses and psychologists). The ADP is designed to develop the skills for supporting patient self-management through social learning processes. It is a Self Management Support (SMS) skills training course for clinicians that aim to enhance acquiring and strengthening clinician-patient communication skills that support co-creation of health and patient self-management. The basic underlying theory for SMS training is that positive comments made by a credible role model (the tutor) about a person's ability to manage a task, leads to an increase in self-efficacy beliefs in the trainee. Increases in self-efficacy will then result in enhanced ability and confidence to perform a task (Bandura, 1977).

The ADP is delivered through three workshops of four hours each co-led by a clinician tutor and a lay tutor. Such co-delivery of ADP courses may have some advantages over delivery by either clinicians or lay tutors alone, since it may afford new opportunities for clinicians to learn from the way the tutors can co produce the training and can readily relate the course material to their own respective roles and experiences. It is therefore to be expected that a co-delivery model for clinicians, who may be many years away from their initial training, will be a new experience and one which may challenge traditional expectations of clinician-patient authority and knowledge.

Design of current study

We report here on the process evaluation of three courses covering clinicians working with patients with COPD in Ayrshire and Arran and the services within Cambridgeshire and Cambridge University Hospitals NHS Foundation Trust. We also examined the course for clinicians working with patients with depression in Devon and Torbay Partnership Care Trust. The ADP course at all sites consisted of three, four-hour sessions.

We aimed to find out:

- What are the experiences of participants, clinicians and lay tutors of the co-delivery model of the ADP?
- What is the experience of clinicians and lay tutors themselves in the use of co-production skills during consultations?
- What is the evidence that ADP results in co productive consultations?

Sample

The sample consisted of six clinicians at Ayrshire and Arran NHS, 14 from Devon and Torbay, and 10 from Cambridgeshire NHS site. In addition, four clinician tutors, i.e. two from Devon and Torbay, and one each from Cambridge and, Ayrshire and Arran; and two lay tutors, one each from Devon and Torbay and, Ayrshire and Arran NHS sites were included.

Measures

The ongoing evaluation is a holistic approach incorporating assessment of the reported use of practices applied in clinical consultations via semi-structured exploratory interviews developed by the evaluation team (Ahmad, Wallace, & Turner, 2009) to assess the experiences of participants and tutors. Videotaping of consultations was also offered in order to analyse the style and content of co production in consultations. Key findings from thematic analysis (Braun & Clarke, 2006) of interview transcripts are discussed here and some illustrative quotes are presented.

Key findings

Aim one

What are the experiences of participants, clinicians and lay tutors of the co-delivery model of the ADP?

All the respondents, including the clinician tutors, clinician participants and the lay tutors reported a general sense of appreciation about the ADP course and found specific elements of the course useful. Both clinician and lay tutors also reported that they felt supported by colleagues and managers for delivering ADP courses, as indicated in a quote below:

"Oh I'm supported by a team of facilitators. I mean as I say in [name of site] we have the clinicians that are on the ADP

Figure 1: Transcription extracts of video-recorded routine consultations illustrating ADP communication skills used in supporting self-management of COPD and chronic pain

Communication skill	Extract
Invite goals As you explore the things the patient might do to self-care, ask them which one they would like to start with.	Clinician: But I would like you to think before, is there something like a goal?, like if I ask you to come and be a bit more physically active, something that you can achieve by working along with myself and the other people in the group, within the next three to six months, what would you hope to achieve? Patient: Really to take my grandchildren to the park Clinician: okay, so taking your grandchildren to the park".

programme very, very helpful indeed." – Lay tutor

However resistance was commonly expressed by clinician participants towards the presence of a patient as their tutor. For example, one clinician participant reported that lay tutors might have felt that they did not get many opportunities to deliver the session but it is because there is a need for additional competences in delivery of training by lay tutors. A lay tutor reported experiencing feelings of ambivalence from the clinician tutor and the participants initially, but felt more comfortable and welcomed as the sessions went along.

"Well I'm more comfortable with clinicians now, in the initial stages, you know, a doctor and such like were people, well in the old fashioned type, you looked up, but then working with them." – Lay tutor

Aim two

What is the experience of clinicians and lay tutors themselves in the use of co-production skills during consultations?

All clinician participants reported a change towards a more partnership oriented consultation style and an increase in the use of SMS skills during consultations.

"I've got better at giving people information and being less prescriptive." – Clinician tutor

A clinician tutor reported that some clinicians were also resistant to learning new ways of consultation after years of professional training and clinical practice in their career. The clinician participants also expressed a need for clearly defining the limits on how much autonomy should be encouraged in patients about decision-making related to self-management of conditions by patients.

"Some people want to be told what to do. We don't want them to be told what to do, so what is the balance?"– Clinician participant.

Some clinician participants also struggled with time management during consultations while providing SMS to patients.

"My self-management {support} style falters as I try to keep to time." – Clinician participant

A lay tutor reported an increase in confidence in attending consultations for themselves in which they discussed self-management of their condition with their clinicians. Another lay tutor found the course so useful that a desire was expressed to spread more awareness about the availability of such training courses for teaching self-management skills to clinicians and patients.

"I think such training programmes should be organised more often and at more NHS, it is so good, I can notice a big change in myself, I wish I could spread it to whole Britain" – Lay tutor

Aim three

What is the evidence that ADP results in co productive consultations

Ten consultations conducted by eight clinicians, which includes one clinician from the Cambridge site and one from Ayrshire have been analysed so far in the CCH evaluation programme as a whole. The video-recordings were analysed with the Roter Interactional Analysis System (Roter & Larson, 2002; Roter, 2006). The analysis showed that the more experienced ADP trained clinicians talked less than their patients and discussed psychosocial issues to a greater degree during a consultation as opposed to those clinicians newly trained or not trained via the ADP. Although these results are merely descriptive, they are encouraging as they may be indicative of a progression from a clinician-centred and mainly biomedical type of consultation towards one in which patients are able to express themselves for longer. In addition, patients may also share not only biomedical information but also information on how their LTC impacts on the psychological and social aspects of their lives and the mechanisms they use to cope with their changing circumstances.

An example of a consultation is outlined below (Figure 1) and contains transcription extracts taken from the video-recording of consultations which illustrates some of the communication skills taught in the ADP that have being applied to routine consultations.

Learning points

The ADP courses are welcomed by participants and by co tutors. Interview findings reveal that clinicians are not wholly convinced of the practical applicability of these practices in their consultations. However, lay and clinician tutors value the co production of courses and co delivery with lay tutors is welcomed, even if, at present it is somewhat restricted to demonstrating their experience of their condition. Finally, there is limited evidence that co production is practised in consultations from the preliminary findings of video analysis of live consultations. We recommend that methods, such video analysis and structured feedback of learning points to the clinician about consultation style is needed to achieve transfer of co production skills to practice in consultations. ❑

Quo vadis?: Russia's health challenges

PATRICIO V MARQUEZ
LEAD HEALTH SPECIALIST, THE HUMAN DEVELOPMENT UNIT, THE WORLD BANK'S EUROPE AND CENTRAL ASIA REGION (ECA)

ABSTRACT: The roots of the health crisis in the Russian Federation are not entirely, or even primarily, in the state of the health care system. High levels of mortality and morbidity, particularly among working-age males, reflect many other factors that transcend the health system as they are related to the aging of the population, growing urbanization, lifestyles and risky behaviours. Spending more money on healthcare, while necessary, will not be sufficient to improve Russia's health outcomes on a sustainable basis. A multisectoral strategy is required, coupled with increased health expenditures and structural reforms to improve the efficiency and effectiveness of healthcare organization, financing and service delivery. However, it should be clear that improving health outcomes is a complex, medium- to long-term undertaking that should be addressed forcefully by the Government at the federal and regional levels as a priority social objective.

Diagnosis of the challenge

Poor health outcomes and demographic decline.

There is a large health gap between Russia and other G-20 countries, as evidenced by some grim statistics (Marquez, et al 2005, UNDP 2009, Eberstadt 2010). Life expectancy at birth at 66 years in Russia lags behind that of Japan by as much as 16 years and the European Union (EU) average by 14 years. In most OECD countries healthy life expectancy (HALE) exceeds 70 years, which is 12 years more than in Russia. Moreover, Russia is one of the few countries in the world where life expectancy has been stagnant or even falling over the last two decades, although it has started to increase recently (Andreev, M. McKee, Shkolnikov 2003, Andreev 2005, UNDP 2009).

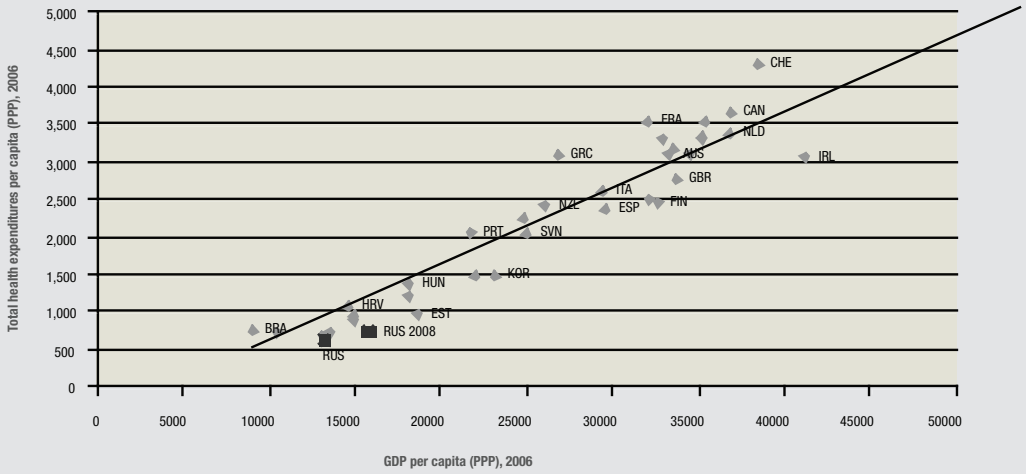
The leading causes of ill health, premature death, and disability, particularly among adult males, are non-communicable diseases (e.g., heart attacks, strokes, cancer), and road traffic injuries – NCDI (Marquez P. et al 2005). Standardized deaths rates per 100,000 population for major causes of death in the Russian Federation far exceed the corresponding rates in EU countries – for instance, the mortality rates from cardiovascular diseases for Russian men are four times higher than those observed in Western Europe (WHO 2008). At 21.1 deaths per 100,000 population, Russia has also one of the highest road traffic fatality rates in Europe (Marquez, Banjo, et al 2009).

Although risk factors may not cause disease, their presence increases the probability that one will develop. The relative risk of developing NCDs increases sharply when various risk factors combine. Alcohol abuse (heavy or binge drinking) is an important determinant of the high and fluctuating adult mortality rates in Russia. According to some recent estimates, it contributes to between one third and one half of all Russian deaths at ages 15–54 years (Leon et al 2007, Nemtsov 2007, Zaridze et al 2009). Overall, close to 40% (44 million persons) of the Russian adult population smoke tobacco. Russia has one of the world's highest smoking rates among men (60.2% or 30.6 million males currently smoke); among females, 21.7% (13.3 million) smoke (MOHSD, WHO, et al 2009). Alcohol and tobacco account for the large difference in adult mortality between Russia and Western Europe (Zaridze et al 2009).

High saturated fat (animal fat, hydrogenated vegetable fats) intake, high salt intake, low vegetable and fruit intake, and low intake of good (vegetable and fish) oils are the main determinants of high blood cholesterol, high body weight, and high blood pressure among Russians, along with physical inactivity. These risk factors also contribute to the onset of NCDs in Russia (Brainerd, and Cutler, 2004, Marquez et al 2005).

High mortality and morbidity among the Russian working age population, coupled with low fertility well below replacement level, represent significant threats to future economic and social development as they are a key contributing factor to the demographic decline in the country. Labour supply is bound to become a greater constraint on economic growth, as Russia's demographic crisis is more serious than that of Western Europe. Russia's population has declined by nearly 7 million since 1992, to an estimated 141 million in 2009; a 5% decline (UNDP 2009, Eberstadt 2010). Russia's population may shrink by an additional 11 million people in the next 15 years (UNDP 2009). Between 2009 and 2017, Russia's working age population is estimated to decrease by about one million people, a year (Bakilana, A. et al 2011, Vishnevsky, A. G., et al. 2008), although these projections do not include potential impact of immigration and better living conditions that could provide a countervailing force in a scenario

Figure 1: Total Health Spending Per Capita (US dollar purchasing power parity): Russia compared to OECD Countries



Source: Adapted from Ivaschenko, et al 2011, data from WHO (2009); World Bank (2009).

of strong, long-term growth in the country. The Russian population is also aging rapidly as reflected by a shrinking youth base and an expanding proportion of the population aged 60 and over. By 2050, the population aged 60 years or over is projected to increase by almost 14 million, and almost 15 percent of the toal population will be 70 year old or over. In the next two decades the dependency ratio – the number of people of working age relative to the number of retired persons – will go from 1 to 5 to 1 to 3 (Eberstadt, 2010), posing a serious economic and social challenge.

Poor health and premature and excess mortality among the working population has additional economic costs in the form of low productivity, early retirement, and high medical expenditures (Marquez, Suhrcke, McKee, and Rocco 2007). On average, 10 days are lost per employee per year because of chronic illnesses in Russia, as compared to an average of 7.9 days in the EU15 countries, and while a hypothetical Russian male age fifty-five with median income and other average characteristics would normally retire at age fifty-nine, having a chronic illness would lower his expected retirement age by two years. NCDs are also Russia's highest-cost conditions. The four most expensive conditions, circulatory system diseases, chronic respiratory diseases, injuries, and digestive system diseases, account for more than 50% of the country's total health expenditures, well above the level of less than 40% in the United States.

Low public spending on health and inefficient use of available resources

The decline in health status in Russia came at the same time with real decreases in public health expenditures (Marquez, et al 2008a, Ivaschenko, et al 2011). In the 1990s, public expenditures for healthcare declined in real terms by one-third due to significant drops in the early years of the political transition at the beginning of the 1990s. Spending rose above pre-transition levels in real terms only in 2006 with additional resources from the National Priority Health Program in 2006-2007.

Public sector expenditures on health in Russia are around 3.7 percent of GDP, which is significantly less than in industrialized countries (OECD and OECD partner countries spend an average of 7.7%). Russia spends around 11% of total government outlays on health. This is comparable to the share spent by countries with a similar level of development. However, it is less than the average 12 to 15% of total government expenditure in EU countries. Russia's total spending, both public and private, at 5.3% of GDP remains below the level of countries with a similar per capita income.

Russia's health spending per capita (in US dollar purchasing power parity) is also lower than would be expected for a country with a similar GDP level, even after the 2005–08 increase in real expenditures (Figure 1).

Notwithstanding relative low levels of spending, Russian health care expenditure is also poorly allocated and inefficiently administered within regions (Tompson 2006, Marquez, Atun, et al 2008b, Ivaschenko, et al 2011). In an international perspective, Russia spends a relatively higher share of financial resources on inpatient treatments compared to primary care and outpatient treatments. While in most EU and G8 countries the share of public health funds spent on inpatient care is between 30 and 40%, in Russia inpatient care consumes almost 60 percent of total public expenditures. Largely as a reflection of the orientation of Russia's health system toward inpatient care, the numbers of hospital beds and medical staff per patient in Russia far exceed the levels observed in EU countries (Ivaschenko, et al 2011).

A study by the International Monetary Fund (IMF) showed that similar health outcomes as in Russia are observed in the countries spending 30-40% less on health (Hauner 2007). Local government expenditure on health in Russia varies substantially relative to gross regional product (GRP), mostly between 2 and 4% of GRP, but can extend to 15%. Overall, local government expenditure on health accounts for about 85% of total health expenditure in Russia. The IMF study and a recent World Bank assessment also showed large efficiency differences across regions, suggesting that current outcomes in health could be produced with about two-thirds of the present inputs if the less efficient regions would emulate the more efficient ones (Hauner 2007, Ivaschenko, et al 2011). As a result, there is an urgent need to improve the structure of healthcare spending, while simultaneously enhancing efficiency.

At the same time, the NOBUS survey of social protection policies and impacts conducted by Goskomstat in 2003 of over 45,000 households found that the poorer income groups – particularly in rural areas – pay more for informal medical care, and as a percentage of consumption (Marquez et al, 2005). In particular, spending on drugs contributes to the high level of out-of-pocket (OOP) payments for health care in Russia. This is mostly due to lack of an outpatient drug benefit under the Mandatory

Health Insurance Program (MHIP) and the underfunding of drugs for hospital care. Drug prices in Russia increased substantially during the recent economic crisis. While the official Consumer Price Index (CPI) increased by 15 percent between March 2008 and March 2009, retail drug prices increased by 29%. The increased drug prices have had a significant impact on the affordability of medicines, particularly among vulnerable population groups. As a result of the recent increase in drug prices, the poor, on average, may have lost more than 1% of their total household expenditure (Marquez, P. and Bonch-Osmolovskiy, M. 2010). This suggests many families may be vulnerable and possibly falling into poverty – or deeper into poverty – as a result of heathcare needs and rising costs.

How to address the health challenges?

Adopting a multisectoral response over the medium term

Few would argue that the roots of the health crisis in Russia are entirely, or even primarily, in the state of the healthcare system. High levels of mortality and morbidity due to NCDI reflect many other factors that transcend the health system as they are related to the ageing of the population, growing urbanization, lifestyles and risky behaviors. Overwhelming international evidence suggests that a multisectoral strategy, including health system interventions, is most cost-effective to address the NCDI challenge (WHO 2011).

In spite of recent measures adopted by the Russian Government to improve the health conditions of the population, additional and sustained efforts are required over the medium term focusing on key underlying risk factors associated with the onset of NCD and the occurrence of road traffic injuries. Political leadership and funding at the federal and regional levels, complemented by broad public-private partnerships are needed as the poor health of employees has a short-term impact on the financial bottom line of every company, as well as a longer-term impact on the prospects for profitable growth. These partnerships could be encouraged with tax credits by the Government.

Controlling alcohol abuse

Despite all evidence of alcohol-related harm and human losses, the real price of alcohol, especially vodka, has constantly fallen over the last two decades. In the middle of 1990, the average Russian monthly income was enough to buy 25 litres of vodka or 100 litres of beer, by 2009 it would buy more than 79 and 358 liters respectively (Zassimova and Marquez, 2011). In 2010, the increased excise duty rate for ethyl alcohol (including vodka) was set at the level of 210 rubles (about US $7 or EUR 5,1) per litre of 100% alcohol, which is 14.6 times less than in Norway, 7 times less than in Finland, and 3 times less than in Poland. A minimum price of vodka of 70 rubles (about US $2.3) per bottle of 0,5 litres was also introduced in order to fight counterfeit alcohol production. Given the significant negative impact of alcohol abuse in Russia, a major effort is required targeting supply (e.g., regulation of production, distribution, prices, access, and advertising) and demand (e.g., information, education and communication campaigns).

Controlling tobacco consumption

In parallel to the effort to control alcohol abuse, a major push is needed to control tobacco consumption. The decision by the Russian Government in October 2010 to launch a comprehensive tobacco control strategy in accordance with the provisions of the International Framework Convention on Tobacco Control (IFCT), that was ratified by the State Duma in April 2008, is a step in the right direction. Beside the development of policies for smoke-free worksites and public places, banning tobacco advertising and promotion and sale to minors, increased excise taxation on tobacco products is the most cost-effective measured that needs to be adopted. Despite the multiple nominal tax hikes since 2003, the real cigarette excise tax increase has been modest in Russia (Ross, Shariff, and Gilmore,2008). As result, the cigarette excise tax rate in Russia remains low. In 2010, the percentage of the retail price for most cigarette brands increased to 37%, but this is significantly lower than those in other European countries where the average tax level has reached 78%.

Promoting of better nutrition and physical activity

Ongoing programmes initiated by the Russian Ministry of Health and Social Development (MOHSD) in 2008 that aim at promoting changes in diet and physical activity, along with efforts regional government, represent an important initiative that needs to be scaled up and sustained.

Scaling up road safety initiatives

The Russian Government has been implementing the Federal Targeted Program for Ensuring Road Traffic Safety 2006-2012. About US$2 billion was earmarked to fund this Program over 2006-2012. In spite of scaled up efforts by the Government and the significant improvement in road safety performance achieved since 2006, road conditions in Russia are still very dangerous vis-à-vis other developed countries (Marquez and Bliss, 2010). As President Medvedev emphasized in a national speech on August 6, 2009, poor road infrastructure, bad organization of road traffic, and insufficient regional and local efforts hinder further improvements. Exacerbating the situation are the absence of effective education programmes for drivers, particularly young drivers, the weak performance of the traffic police, and the unsatisfactory condition of emergency medical services in some regions. Countries that have successfully reduced road traffic injuries and fatalities – such as, Australia, Great Britain, the Netherlands, New Zealand, Sweden, and the United States – have adopted a safe systems approach which is anchored in the long-term vision of eliminating road deaths. Under this approach, improved road safety results depend on three inter-related elements: institutional management functions, interventions and results. Russia has in place most of the elements of the safe systems approach but additional efforts are required to strengthen institutions and governance capacity for road safety, including the lead agency capacity to better coordinate and manage an effective multisectoral response.

Redesigning healthcare organization, financing and service delivery

The chronic nature of NCDs, their "chronicity," poses a major challenge to health systems worldwide because with the onset of NCDs people often spend substantial parts of their lives in less than perfect health and in need of medical care (Frenk 2011). Well designed disease prevention, treatment, and rehabilitation interventions, which are mutually reinforcing, are required to

reduce the burden of NCDs and control their potentially enormous pressure on the health system. Besides the multisectoral health promotion interventions discussed above, the importance that needs to be attached to addressing the NCDI challenge is Russia should drive current and future health system reform efforts.

Increasing the funding for healthcare

A key challenge facing the Russian health system is the relative lack of public sector funding at its disposal to cover the cost of the services that are already promised by the Government under the Program of State Guarantees of free, medical services to the whole population (Marquez et al 2008, Ivaschenko, et al 2011). The content of the package is quite extensive for a country that spends a relatively low share of GDP on healthcare. Access to healthcare has been compromised consistently over the last 15 years as available resources have been insufficient to cover the guaranteed package (World Bank 2004, Tompson 2006). Russia needs to spend more on health care than it currently does. It is reasonable to assume that part of this increase could and should be met by public health service provision that is likely to remain an important pillar of the system, despite the expected growth of private provision and finance. The Russian Government, therefore, would need to gradually increase aggregate public funding on health above the current 3.7% of GDP level in 2006 to a 4.5-6.0% of GDP level as in other middle-income countries within the next five-to-ten years. These suggested increases take into account the prevailing demographic trends and strong economic growth outlook for the Russian economy that are expected to generate significant additional demand for health care services (Marquez et al 2008b). Private spending is also expected to increase from the current 1.8% of GDP to about 2.5-3% of GDP in the medium term.

This increase in public expenditures would help address some long-standing problems: (i) raise the base salaries of physicians and nurses, (ii) introduce incentives for improving performance by differentiating remuneration depending on the volume and quality of health services; (iii) ensure free drug provision for hospital care and fund targeted outpatient drug programs for children and the elderly, and (iv) rehabilitate health facilities and replace outdate equipment and train personnel (Vishnevskiy et al, 2007).

Where should additional public resources come from? The short answer is largely from improved composition of public expenditures towards long-term needs of key social sectors such as health, education and pensions and away from less productive categories of public expenditures (e.g., untargeted subsidies and transfers, general administration expenditures and unproductive public investments). As the Russian healthcare financing system is based mostly on general budget revenue rather than on earmarked payroll taxes, mechanisms should also be explored to raise additional funding from regional budgets – as contributions to mandatory health insurance (MHI) of non-working population. Another area that merits further analysis is the channeling of additional private expenditures for health through the development of voluntary health insurance (VHI) to complement the MHI benefit package.

Spending more money, while necessary, will not be sufficient to improve Russia's health outcomes on a sustainable basis. It is critical that increased health investments and expenditures in the Russian health system be accompanied by structural reforms to improve the efficiency and effectiveness of healthcare organization and service delivery. To this end, four areas should be targeted to gradually improve the allocation and use of health funds within regions in the Russian Federation (Marquez, Atun, et al, 2008, Tompson 2006, World Bank 2004):

Centralizing pooling of pevenues

The health financing system in Russia is currently very fragmented and much more decentralized than in most middle- or high-income countries. It is also inefficient as it unnecessarily duplicates administrative efforts and increases transaction costs. Funding comes from federal, regional, and municipality budgets, in addition to the MHI established in 1993. Budget funding accounts for about 60% of total public health spending in Russia and the MHI for the rest. Most public sector funds, over 85%, are raised and allocated at the regional level through general revenues and the 5.1% rate of payroll tax. The equalization of budget transfers from the Federal level, however, have never been earmarked for health, and most regions have mostly been unwilling to either contribute for nonworking groups or to pool necessary funds under the regional health insurance funds, as called for in the legislation. The gradual integration of financial resources from federal and regional government transfers and the MHI would enable the establishment of a single-payer funding for public health services. In turn, this would enable development of more meaningful strategic plans for the regional health systems as a whole, encourage integration and coordination in service delivery, reduce barriers to intra-sectoral activities, and provide greater flexibility with transfer of funds between services.

Revising the guaranteed package of medical benefits

While healthcare spending is expected to go on rising, both in absolute terms and relative to GDP, the balance between commitments and resources cannot be restored merely by increasing the latter. The guaranteed package of medical benefits itself will have to be re-examined. This will involve more than an assessment of what the Russian state can actually afford, although resource constraints will clearly be a critical factor. If the state guarantee is to be meaningful, the package must be transparent to both providers and patients by specifying the types, volumes, procedures and conditions of healthcare provision; it must also provide mechanisms for citizens to assert their rights if the commitments in the package are not met. A set of services and drugs should be established for priority diseases to be provided free based on the government guarantees. It would also be better if the Package of State Guarantees were funded from a single source, thus preventing perverse incentives for unjustified shifting of costs from one funding source to another.

Addressing the structural imbalances in the organization of healthcare services

Russia's health system will not be able to handle effectively the growing NCD burden without striving to integrate different levels of care to guarantee the continuity of care. To this end, the regional health services in Russia need significant capital investment to restructure, renew and appropriately equip its infrastructure. Although there are special issues of geographic dispersion and severe climatic conditions, making some additional health infrastructure necessary, this does not necessarily mean building new facilities, but rather modernizing the existing network. As

shown by successful experiences in some regions such as the Chuvash Republic and Voronezh Oblast (Marquez and Lebedeva, 2010) that are developing integrated delivery systems, with judicious investment in hospital, intermediate care centres, primary care facilities, emergency medical services, upgrading competences of human resources, and strengthening management systems, including the introduction of electronic medical records, the number of admissions and the length of stay in Russian hospitals can be substantially reduced while expanding the coverage of ambulatory services, to generate good health outcomes. This will enable substantial right-sizing of the costly hospital infrastructure as many facilities have unused capacity, and allow improvement in the quality and utility of the existing capital stock and the creation of a suitable environment that can apply new medical technologies to effectively diagnose and treat NCD and injuries alike.

Attention is also be required on how to strengthen the organization and financing of long-term care services, including nursing home and home care, for people who depend on ongoing help with the activities of daily living caused by aging, chronic diseases, and physical or mental disability (OECD 2005).

Developing provider payment systems with incentives to enhance the quality and efficiency of health services

Building on innovative contractual arrangement introduced in the Chuvash Republic and Voronezh Oblast, as well as in other regions, incentives should be introduced to expand the scope of services provided and to improve service quality at the primary health care level (PHC). Per capita payments should be combined with performance related pay linked to achieving quality standards or providing new services. For example, additional (bonus) target payments could be provided for reaching certain quality and efficiency targets (such as expanded coverage for immunization, cervical screening, annual health promotion advice to men and women, smoking cessation, alcohol reduction, elderly checks, and developmental checks for infants and children). Alternatively, fee-for-service payments could be used to strengthen existing services and to expand service scope, by introducing new services for general health promotion, dedicated chronic disease management programs (for diabetes mellitus, ischemic heart disease, heart failure, hypertension, asthma, chronic obstructive pulmonary disease, epilepsy, stroke) and minor surgery. The payment systems for PHC should be modified so that a proportion of the payment for PHC units (20-25%) is related not to inputs but outputs and outcomes: with clearly defined quality targets for key nonommunicable diseases (e.g., cardiovascular diseases, cancer, diabetes, chronic lung diseases) that constitute the greatest disease burden for Russia.

Hospitals in Russia are paid mostly per treated case but some items of expenditure (mostly fixed) are not included in MHI tariffs and covered directly from budgets controlled by governments of various levels This combination is inefficient as line item budgeting pays for inputs providing little incentive for providers to improve efficiency. Funds provided through line item budgeting should be incorporated into the existing tariffs, which in turn should be modified to incorporate quality and efficiency standards (for example stipulating average length of stay in line with those that can be achieved through the use of more cost-effective medical interventions). Further, as case based payment methods are inflationary (because they encourage providers to increase activity levels to generate maximum revenues) they should be combined with cost and volume contracts that specify a level of activity for a given year and for a given specialty.

Summary

As discussed above, the current health challenges in the Russian Federation need to be addressed through broad policy and institutional reforms at the federal, regional, and municipal levels covering many sectors and not only the health system. Improving health outcomes by implementing the proposed reforms in tandem to ensure overall coherence of effort is a very complex, medium- to long-term undertaking that should continue to be addressed forcefully by the Russian Government at the federal and regional levels as a priority social objective. ❑

Patricio V Marquez is currently a Lead Health Specialist, at the Human Development Unit of the World Bank's Europe and Central Asia Region (ECA). In ECA, he has worked in different countries since 2004, including the Russian Federation, Georgia, Azerbaijan, and the Central Asian countries, managing health system reform and disease-specific projects. He is the lead author of recent reports on road safety in Europe and Central Asia; the demographic and health crisis in Russia; health system challenges in Russia; and blood transfusion systems and the spread of HIV in Central Asia. He has also been working in China, where he co-authored an upcoming report on NCDs that will be launched in Beijing in mid-2011. He also recently advised and co-authored a policy note on NCDs and road traffic injuries in Cambodia. He was part of the team that prepared the US$1 billion Global Avian Influenza Preparedness and Control Framework Program in 2006, and the US$1.2 billion Global Food Response Facility in 2008. Over 1988-2004, he worked for the World Bank in the Latin America and the Caribbean Region in the preparation and management of health sector development projects in Argentina, Chile, Colombia, Dominican Republic, Ecuador, Mexico, Paraguay and Venezuela, a Science and Technology Program in Brazil, and in the early 2000s led the preparation and start up implementation of the Regional HIV/AIDS Prevention and Control Program in the Caribbean that covered eight countries and CARICOM. He pursued his graduate studies at the Johns Hopkins University Bloomberg School of Public Health.

References

Andreev, E. M. 2005. "Demographic Consequences of Mortality Reversal in Russia." Paper for the XXV IUSSP International Population Conference, Section 36: "Demographic and Socio-Economic Consequences of Adverse Mortality and Health Trends," Tours, France, July18.

Andreev, E. M., M. McKee, and V. M. Shkolnikov. 2003. "Health Expectancy in the Russian Federation: A New Perspective on the Health Divide in Europe," *Bulletin of the World Health Organization* 81(11): 778-87. Epub 2004 Jan 20.

Bakilana, A. et al. 2011. "The Russian Demographic Transition and Its Implications for Adult Learning and Long-Term Care Policies." Russia Demographics Technical Note (Report No 47959-RU). Washington, D.C.: World Bank.

Brainerd, E., and D. M. Cutler. 2004. "Autopsy on an Empire: Understanding Mortality in Russia and the Former Soviet Union." NBER Working Paper 10868, National Bureau of Economic Research, Cambridge, MA. http://www.nber.org/papers/w10868.

Eberstadt, N. 2010. Russia's Peacetime Demographic Crisis: Dimensions, Causes,Implications. Seattle, Washington: The National Bureau of Asian Research.

Frenk, J. 2011. "Framing the Diagonal Approach." Presentation delivered at the Conference "The Long Tail of Global Health Equity: Tackling the Endemic Non-Communicable Diseases of the Bottom Billion." The Joseph B. Martin Conference Center, Harvard Medical School, Boston, March 2, 2011.

Hauner, D. 2007. "Benchmarking the Efficiency of Public Expenditures in the Russian Federation." IMF Working Paper 07/246. Fiscal Affairs Department. Washington, D.C.

Independent Institute for Social Policy. 2008. "Assessment of the Health Care Reform Experience in Regions of the Russian Federation." Final Analytical Report to the World Bank.

Ivaschenko, O. et al. 2011. Social Expendtirure and Fiscal Federalism in Russia. Report No. 54392-RU. Washington, D.C.: World Bank.

Leon, D., Saburova, L., Tomkins, S., Andreev, N., Kiryanov, M., McKee, M., Shkolnikov, V. 2007. "Hazardous alcohol drinking and premature mortality in Russia: a population based case-control study." *Lancet* 369(9578):2001–2009.

Marquez, P and Lebedeva, N. 2010. "Restructuring Regional Health Systems In Russia." ECA Knowledge Brief 32. Washington, D.C.: World Bank.
http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/0,,contentMDK:22728288~pagePK:146736~piPK:146830~theSitePK:258599~isCURL:Y,00.html

Marquez, P. and Bliss, A. 2010. "Dangerous Roads: Russia's Safety Challenge." ECA Knowledge Brief 27. Washington, D.C.: World Bank. http://www.worldbank.org/eca

Marquez, P. and Bonch-Osmolovskiy, M. 2010. "Action Needed: Spiraling Drug Prices Empty Russian Pockets" ECA Knowledge Brief 19. Washington, D.C.: World Bank.

Marquez, P., Banjo, G., and others. 2009. Confronting "Death on Wheels. Making Roads Safe in Europe and Central Asia." Europe and Central Asia Region Human Development Department. Washington, D.C.: World Bank.

Marquez, P. and others. 2008a. Public Spending in Russia for Health Care: Issues and Options. Washington, D,C.: World Bank.

Marquez, P. Atun, R. and others. 2008b. "Better Outcomes through Health Reform in the Russian Federation – The Challenge in 2008 and Beyond." Washington, D.C.: World Bank.

Marquez, P, Suhrcke, M., McKee, M. and Rocco, L. 2007. "Adult Health In The Russian Federation: More Than Just A Health Problem." *Health Affairs* 2 6 (4): 1040-1051.

Marquez, P. and others. 2005. Dying Too Young: Addressing Premature Mortality and Ill Health Due to Non-Communicable Diseases and Injuries in the Russia Federation. Europe and Central Asia Region Human Development Department. Washington, D.C.: World Bank.

Ministry of Health and Social Development, WHO, et al. 2009. Global Adult Tobacco Survey. Russian Federation 2009 Country Report. Moscow: MOHSD.

Nemtsov, A. V. 2007. "Alcoholism in Russia: a history and current trends." J*ournal of Neurology and Psychiatry* 1:S3–S8.

Organization for Economic Cooperation and Development. 2005. Long-Term Care for Older People. Paris: OECD.

Ross, H., Shariff, S. and Gilmore, A. 2008. Economics of Tobacco Taxation in Russia. Paris: International Union Against Tuberculosis and Lung Disease.

Tompson, W. 2006. Health care reform in Russia: Problems and Prospects. Economics Department Working Papers No. 538. Paris: OECD.

Vishnevsky, A. G., et al. 2008. "The Evolution of Demographic Structures in the Russian Federation: Analysis and Projection." Mimeo: World Bank.

Vishnevsky, A.G., Kuzminov, Y.I., Shevskiy, I.M., Shiman, I., Shishkin, S.V., Yokobson, L.I., and Yasin, E.G. 2007. "Russian Healthcare: Way Out of Crisis." Mimeo. Moscow: State University-High School of Economics.

United Nations Development Program (UNDP), 2008 National Human Development Report, Russian Federation. 2009. Russia Facing Demographic Challenges. Moscow: UNDP, http://europeandcis.undp.org/home/show/F64CE386-F203-1EE9-BD6D78D5790CB695.

WHO. 2011. Global status report on noncommunicable diseases 2010. Geneva: WHO.

WHO Regional Office for Europe. 2008. Atlas of Health in Europe, 2nd Edition Copenhagen: WHO Europe, http://www.euro.who.int/Document/E91713.pdf.

World Bank. 2004. "TheHealth Sector: Russia Health Policy Note." The World Bank, Washington, D.C., March, http://194.84.38.65/esw/files/ Health_PN_eng.pdf.

Zaridze, D., Brennan, P., Boreham, J., Boroda, A., Karpov, R., Lazarev, A., Konobeevskaya, I., Igitov, V., Terechova, T., Boffetta, P., Peto, R. 2009. "Alcohol and cause-specific mortality in Russia: a retrospective case–control study of 48 557 adult deaths." Lancet 373:2201-2214.

Zassimova, L., and Marquez, P. 2011. "The alcohol epidemic in Russia." Draft ECA Knowledge Brief . Washington, D.C.: World Bank.

Over-hospitalization: An issue for hospital management

T Y VEKOV
CHAIRMAN OF THE DIRECTORS BOARD, BULGARIAN CARDIAC INSTITUTE

ABSTRACT: The topic of this article is the insufficiently increasing rate of hospital admissions as a crucial factor for increasing hospital expenditures. The article focuses on the particular analysis of issues of induced hospital services demand, low level of effectiveness of the inpatient care system for referring, disproportions of accounted cases compared the need for therapies, patients' distrust toward lower sectors of healthcare, low efficiency of primary outpatient care and specialized outpatient care, lack of control, inadequate organization structure, strategy and improper NHIF regulation. The effective solving of these problems is a crucial term for improvement of the quality of inpatient care.

The most fundamental issue in hospital management is the permanent monitoring of the quality of stationary social care. The results of the thorough analysis reveal that our current hospital infrastructure surpasses the present and predicted social needs at a great extent as a result of its outdated structure and model. Still some hospitals, mainly those affiliated with universities, have not reduced their expenditures in compliance with received revenue, and therefore the end of each fiscal year they rely on the government budget for covering their overrun. This is a signal of bad healthcare management of those links in the system of inpatient care in our country. The approach of coping with overrun via regular acquittal by the Ministry of Finance has been observed over the whole period of healthcare reform, and what is frustrating is the fact that the amount of overrun resources grows each year. This approach becomes the cause for inexpedient stimuli for ineffective costs.[1,2,4].

The political and health strategies, intentions, and opinions are diametrically opposed to the patients' standpoint for negative outcomes of the hospital sector reform. The public is highly dissatisfied with the level of inpatient care.[1] These controversies need an objective expert analysis of hospital management quality.

Effective resource management in the contemporary hospitals depends to a great extent on how reasoned the mechanisms and indications of patient hospital admissions are. Extended criteria for hospital admission increase costs for hospital resources. Insufficiently grounded indications for patient hospital admission have the same effect.

Extended and poorly grounded indications for hospital admission may be recapitulated with a synthetic term – namely, over-hospitalization. This term signifies the excessive volume of inpatient care that surpasses the reasonable demand for such care. Therefore, a large number of patients that could be treated effectively at home go through hospital stationaries.

Over-hospitalization is an unreasoned overloading of the hospital potentiality in general and is also the reason for unjustified increase of the cost of already deficient hospital resources. Thus the shortage of hospital resources grows which causes the quality of inpatient care to lessen.

These various adverse effects of over-hospitalization pose series of problems for hospital management.

In a special report and analysis of inpatient care quality assigned by the Management of the National Health Insurance Fund (NHIF) to the analysing company Sanigest Swiss, we come across many confusing inferences regardless of the resources that increase yearly.[5] Particular tendency to over-hospitalization can be found in the analysis of NHIF's annual activity reports for the period 2002-2007: hospital admissions rate for diseased patients has increased by a 26% over a period of one year. This tendency is at entire variance with the purpose of healthcare strategy – which is to restructure inpatient care so as to contribute to the reduction of hospital admissions and help primary care treatment include a wider range of conditions, especially chronic conditions such as diabetes, chronic obstructive pulmonary disease, cardiovascular diseases, asthma, etc. Analysis shows that in all regions of the country patients are diagnosed identically upon hospital admissions.

Particularly noticeable is the fact that the main diagnoses upon hospital admission are bronchopneumonia and heart failure, with total morbidity rates of population conspicuously exceeding the average European standards. For instance, the average bronchopneumonia morbidity for European countries is 350 cases/10,000 people, whereas in Bulgaria this indicator is 1,280 cases/10,000 people. This proves that the number of hospitalized patients with concrete diagnoses is not related to the real social needs but rather is an induced demand on the part of the provider of hospital services. Therefore, hospitals create increasing activity

Figure 1: Comparative data on the number of hospital admissions in Bulgaria and the countries members of EU

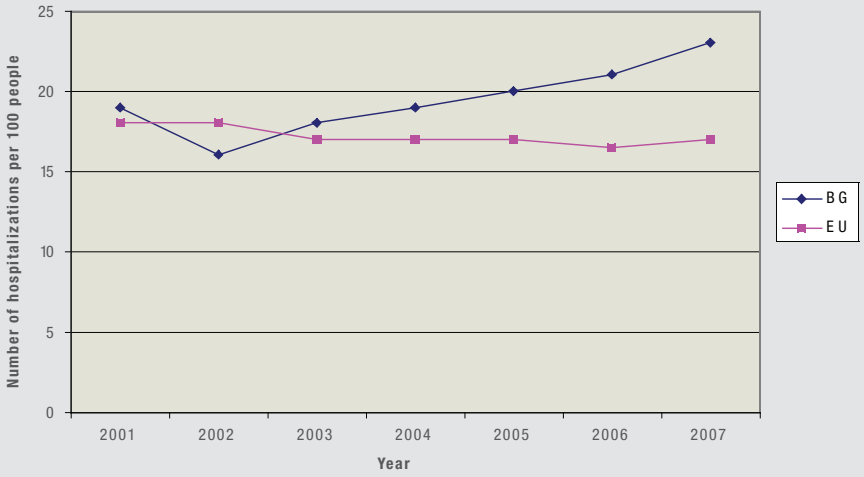
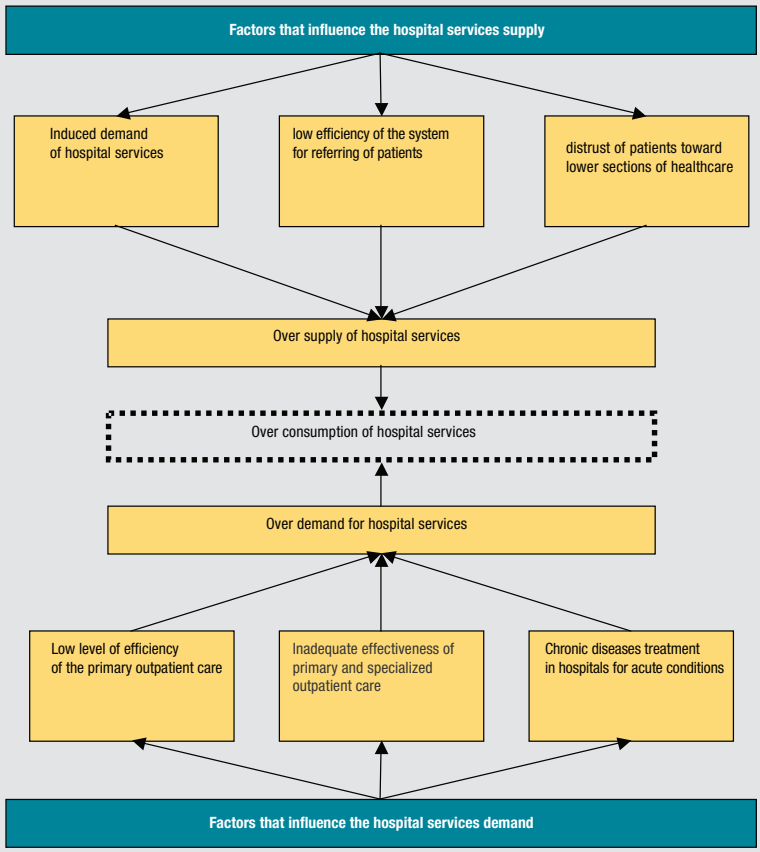


Figure 2: Structure of factors that caused over-hospitalization in the mandatory health insurance system in Bulgaria



accounting in certain therapeutic domains in order to maximize their profits and revenues by illegally putting NHIF budget to use.

Figure 1 shows information concerning the number hospital admissions in Bulgaria compared to the number of hospitalizations in member states of the European Union.[6,7]

In the state members of EU every year an average of 16 patients out of every 100 citizens are referred to hospital admission, whereas in Bulgaria the number of this indicator exceeds 22 patients.

The hospital care financial indicators of NHIF for the period 2000-2007, are:

✚ the nominal value of total expenses for inpatient care for this period increased by 610%. After an account had been rendered of the inflation effects for this period, it became clear that the increase in real terms was 390%. Therefore, it can be drawn the following conclusion: inpatient healthcare is financed as a priority by NHIF. The reasons for increased cost possibly are:

- induced demand of hospital services;
- low level of efficiency of the system for referring of patients;
- lack of firm organization of the structure of hospital care based on clinical paths;
- distrust of patients toward lower sections of healthcare;
- inadequate effectiveness of primary and specialized outpatient care;
- lack of control by NHIF;
- historical prerequisites for healthcare demand.

The easy option for hospital admission through the portals of emergency care of every regional, governmental or university and hospital contributes to the low level of efficacy in the system for referring patients. Moreover, some of the specialists working both in outpatient and inpatient care refer patients to their own services which are of higher and more expensive level of healthcare services, such as hospital care. This factor also contributes to over-hospitalization.

Hospitals are encouraged to admit all patients and also to present patients with false diagnoses in order to ensure that more expensive clinical paths are reported and classified. Besides, hospitals tend to transfer patients from one ward to another so as to register a new case through a different clinical path.

The main reason for chronic diseases to be often treated in hospitals for acute conditions is the shortage of units for social care, consistent treatment, and rehabilitation. The other important reason for this is the poor quality of specialized outpatient care, especially in the cases of chronic disease. For instance, the results from a study showed that more than 60% of patients diagnosed with diabetes and put on an oral antidiabetic therapy are outside disease control which suggests frequent complications and increased number of hospital admissions rate.[3]

When the unit price of the relevant medical activity approaches

the real costs (following a sharp leap of the costs of clinical paths), then there proportional reduction in the volume of accounted activity and morbidity, and hospital admission rates become commensurable with the levels of these factors reported in Central Europe. It is so proved that NHIF's pricing policy is entirely incorrect and it compels inpatient care suppliers to increase the volume by accounting for non-performed medical activities.

Another important reason for over-hospitalization is the inefficiency of the system for referral of patients. Due to the untroubled access through emergency portals, in 2007 612,103 patients were hospitalized which is 49.3% of the total number of hospital admissions. Public's distrust toward primary outpatient care is an important reason for over-hospitalization as well. In general, the public is not quite willing to agree with the concept of how crucial is the role of primary care in healthcare. Many patients think thats. NHIF and the irrelevant organization structure of healthcare created by NHIF are the culprits for the forming of the public's opinion that the main function of a GP is to refer patients and to prescribe medicines. Resulting from this fact, primary outpatient medical care in Bulgaria has a low level of efficiency. Only 65.5% of the patients are treated in primary outpatient medical care, compared to more than 80% of the patients in other countries. NHIF's improper notion, irregularities, and the exorbitant limitations of the GP's capacity are among the main reasons for this fact.

A significant indicator by which the quality of inpatient care can be evaluated is the number of transfers for hospitalization from one hospital to another – recurrent hospital admissions that are caused by unsolved medical issues in the period after hospital treatment. In 2007, the patients that had been transferred from one hospital to another and did not receive sufficient clinical results were 268,819, which was 22.12% of the total number of hospitalized patients and the tendency is negative over a five-year period of time and each year increases by 2.28%.

The Annual activity report of the National Health Insurance Fund pointed out the following reasons for the leap of expenses for inpatient medical care:

- An average monthly increase of hospital admissions by 7% or 10,000 patients compared to the values from the previous year, which includes an average raise of emergency hospitalizations by 33% resulting from the opening of emergency portals in hospitals for inpatient care;
- An increase in the number of inpatient care partners that are bind by a contract. The hospitals that have signed a contract opened 74 new structures and on the same grounds contracted 315 new clinical paths to be opened. Contrariwise, NHIF signed agreements for 20 new hospitals (fourteen private, four governmental, and two municipal), which on their turn contracted 174 clinical paths. It is here where the analysis of the Budget Committee experts is entirely untrue, since the expense for health insurance payments is determined by the number of patients that have been admitted for hospital treatment and not by the number of hospitals where they have been transferred to.

Therefore, costs increase due to 2 main reasons:

- Unfulfilled health needs – for instance, the average rate of primary PCIs for acute MI in Bulgaria is 68 out of every 100,000 people, whereas the average indicator for Central Europe is 124 out of every 100,000 people. It could so be presumed that each new cardiology clinic that has an interventional laboratory at its disposal would be a cause for NHIF's expenditures to go up due to inadequate demand for healthcare services;
- Abuse of the induced demand for healthcare services on the part of hospitals on purpose to increase profit. It should be noted that the main reason for the low control over that process is that NHIF exerts control in an inadequate way.

For example, in Bulgaria the number of accounted clinical paths for acute MI treatment without the usage of invasive methods, meaning that conventional therapy or fibrinolysis with mortality rates five times higher than those of primary PCI, is 950 per 100,000 people, whereas the same number in the state members of EU is 230 per 100,000 people. Consequently, the conclusion is that hospitals account for non-invasive MI treatment funded by NHIF while the patient's actual diagnosis is not MI. The lack of medical auditing covers up such cases and they passed unnoticed by the control system.

As a result of a compilation of untrue conclusions on the issues of inpatient care, in 2007 NHIF have drawn up the following suggestions and recommendations on how the hospital sector structure should be optimized. These recommendations and suggestions come together with preliminary measures for alternation of the financing mechanisms and so a more equitable resource distribution could be reached:[5]

- The partners that NHIF has signed a contract with - the inpatient hospitals – have number of beds for active treatment that is 55% more than the number of beds that the regulatory recommended National Health Map has budget for. In Bulgaria the ratio of beds for active treatment/1,000 people is 4.69, whereas the same indicator is 3.52 for the EU member states;
- Deficiency of beds for further treatment and consistent care. In Bulgaria has been reported shortage of beds for long-term care and rehabilitation – 3.4 per 1000 people at the age of over 65 years. In the European Union member states the average is 42 per 1000 people. The main reason for this is that there are no mechanisms and funding to pay for and sustain that kind of activity;
- A considerable increase in the number of hospitalized persons in the hospitals for inpatient care, mainly as a result of damaged vertical connections between primary care and inpatient care. In 2007, in Bulgaria there was an average of 22 hospital admissions per 1,000 people, while in the EU countries this number was 18. Hospital admissions in Bulgaria increased to those high levels due to the flaws in the contracting process and the mechanisms for payment of clinical paths.

The comparison between the data from the Sanigest analysis and the data from NHIF's Annual activity reports, leads to a necessary conclusion on the condition of hospital care in Bulgaria ten years after the healthcare reform has been launched – that there is a high material, financial and human need of resources and surprisingly bad clinical results. Consequently, the effectiveness of the hospital healthcare system is extremely low, and there is an urgent need for reforms to be made.

In the latest health strategy for restructuring of the hospital healthcare system prepared by the Government (2008-2013), the

Parliament took the following measures:

- assessment of hospital care infrastructure by regions;
- preparation of rules for health planning, regulation, and control;
- changes of mandatory nature in the National Health Map for successful restructuring of the healthcare network in accordance with the public needs;
- development of three components for each hospital: stationary wards, ambulatory wards, and day surgery wards;
- implementation of an investment policy;
- defining sites for privatization and regulating the order of privatization;
- establishing of public-private partnerships.

Our expert standpoint is that this strategy, if formulated so, would not lead to denationalization of the property and activities in inpatient care, but would put a restriction on competition, it would create regional monopolies through the National Health Map, and it would discourage all intentions for private investment in this field. Thus, the quality and effectiveness of healthcare would decline.

The analyses made until now of the development of healthcare in the years of reform reveal a grave deficiency of managerial skills in this health domain that is of high importance to the society. The achieved results are definitely dissatisfying – some of these results consist in total disappointment of the society and the medical experts as well as decayed quality of inpatient care, high rates of preventable mortality, and a constant negative trend toward increasing total mortality. Another major negative outcome of the hospital care reform that the public reported is the emerging of corruption on the lower as well as on the higher hierarchical levels, and its influence on quality and availability.

A major flaw of the principle and organization of NHIF's work is that it urges healthcare managers to consider clinical paths would assist the financing of hospital care, which is a major mistake. These mistakes result in the tendency for methods of old and insufficient treatments, even when there are contemporary alternatives for treatment.

Analysis of hospitalization data gives grounds for the following inquiry to be made – why are 75% of the patients with acute MI being treated by methods that are related to the highest mortality rates, provided that availability is not a restricting factor?

The objective answer is one only – because healthcare managers, on purpose to improve the financial achievements of the healthcare institution that they manage, strive to treat every patient, with no regard to the fact whether they have or apply the most beneficial medical methods. They could, instead, refer the patient to another healthcare institution, where he/she would be receive the most effective care. This process is also encouraged by NHIF,which signs clinical path contracts for clinical paths for treatment of acute MI without reperfusion therapy and in regions where primary PCI is totally available.

The grave issue is that clinical paths in Bulgaria are not used as a mode for quality assessment. Instead they are used as a tool for hospital funding. The impact of this on the public is a sharp restriction of availability of medical services of high quality and raise of the mortality rate. The fact that medical algorithms of clinical paths are incomplete obstacles availability even further and also encourages physicians to indulge in documental and financial abuse. The decisions of NHIF not only fail to improve quality, availability, and effectiveness, but also they additionally restrict the option Bulgarian healthcare patients to receive a treatment of a high quality.

Conclusions

- The frequency of hospital admissions increases at a more rapid pace and inversely to that of the other EU member states.
- Costs for inpatient care increased abruptly during the period that this article is focused on. The main reasons for this are induced inpatient services demand, low efficiency level of the referral system, patients' distrust to lower healthcare levels, impaired efficacy of the primary and specialized outpatient medical care, insufficient control, incorrect organization structure and conception, and unsuitable modes of regulation by NHIF.
- The incorrect policy and conception of NHIF impel hospital care suppliers to increase the volume by accounting for non-performed activities.
- The disproportions registered in the accounted cases when compared to the therapeutic needs, both in direction of enormous overrun (pneumonia, acute MI, etc.) as well as in direction of deficiency and restricted availability (PCA), show NHIF's incapability of handling the hospital care costs in order to reduce the rates of induced demand and the accounting for non-performed activities in accordance with false diagnoses, as well as its incapability of carrying out the needed life-saving treatment and availability in cases of deficiency.
- The incorrect healthcare policy and the insufficient hospital management cause the healthcare to adopt a consumptive nature, which is beneficial only for physicians and not for patients. More than 50% of the total hospital revenue is distributed as expenditures on the personnel – for insurances and salaries. Hospitals do not invest in academic and scientific research activities which in the long run become the cause for deterioration of the qualification and inferior quality of the treatment.
- The low level of effectiveness of primary and specialized outpatient services becomes a reason for over-hospitalization as well. The most important reasons for the insufficient effectiveness of outpatient care are the irrelevant notion of NHIF, the unsuitable reimbursement, and the exorbitant restriction of the GPs' capacity. This is proved by the high rate of preventable hospital admissions and the low levels of inpatient one-day surgery. ❑

References

1. Борисов, В. Здравната реформа на кръстопът - хаос или мениджмънт. 2008, 140 с.
2. Воденичаров, Ц., Борисов, В., Гладилов, С., Чамов, К., Кръшков, Модел за ефективно развитие на българското здравеопазване, сп. Здравен мениджмънт, брой 2, 2005, 5-15.
3. Веков, Т., Джамбазов, С., Детайлен анализ на ефикасността на комплексите терапии на пациентите със сърдечносъдови заболявания в България, сп. Съвременна медицина, том 59, брой 3, 2008
4. Петрова, З., Чамов, К., Гладилов, С., Качеството в здравеопазването – съвременни измерения и тенденции, 2008, 270 с.
5. Серконе, Дж. Възможности за подобряване на практиките, свързани с насочвания от извънболничната помощ за болнично лечение. [доклад] Sanigest, 2008г. http://www.nhif.bg/bg/default.phtml?w=1024&h=738
6. Figueras, J., McKee, M., Cain, J., Lessof, S., Health Care Systems in Transition: Learning from Experience, European Observatory on Health Systems and Policies, 2004
7. Zelman, W., Mc Cue, M., Millikem, A., Glick, N., Financial Management of Health Care Organizations: *An Introduction to Fundamental Tools, Concepts and Applications*, 2007

World Hospitals and Health Services 2011 Volume 47 Number 2

Résumés en Français

L'EFFET CHRISTOPHE COLOMB: « DÉCOUVERTE » DES MALADIES NON TRANSMISSIBLES PAR LA COMMUNAUTÉ DES DONATEURS

Les 28 et 29 avril 2011, la première conférence ministérielle mondiale sur les modes de vie sains et les maladies non transmissibles (MNT) s'est réunie à Moscou pour promouvoir la lutte contre les maladies non transmissibles et proposer des lignes directrices pour la prochaine Réunion de haut niveau sur les MNT qui aura lieu en septembre 2011. A la suite de quoi, l'Organisation mondiale de la santé (OMS) a préparé une "Déclaration de Moscou", en se plaçant à l'épicentre mondial de la prévention et de la lutte contre les MNT, en collaboration avec son unique client dans les Etats-membres, les ministères de santé publique. La Déclaration n'a tenu aucun compte du travail intensif et toujours actuel des hôpitaux qui appartiennent à des pays en développement et sont gérés par eux dans le tiers monde et de leur participation clinique à la prévention et au traitement des MNT depuis quatre décennies.

Cet article va examiner le fardeau mondial de MNT dans le tiers monde, l'identification des MNT par des sources sûres avant la Déclaration de Moscou, le rôle des hôpitaux dans la lutte contre ces maladies en l'absence de tout appui de donateurs, les investissements considérables de fonds publics et privés pour construire des établissements pour patients ambulatoires ou hospitalisés, et comment les donateurs ont ignoré l'industrie à base hospitalière déjà en place dans les pays en développement.

EDUCATION DU PUBLIC AUX MNT – QUE PEUVENT FAIRE LES HÔPITAUX ?

Etre éduqué aux risques de maladies non transmissibles (MNT), c'est pouvoir obtenir, comprendre et utiliser les informations permettant de prévenir, traiter et gérer les maladies chroniques. Il est prouvé que l'incapacité de le faire est liée à une conduite davantage à risques, de mauvais choix de santé et un médiocre état de santé. Les hôpitaux ont un rôle important à jouer en éduquant le public aux MNT tout au long de l'« itinéraire MNT» d'un patient, de la prévention à la gestion en alignant leurs communications sur la capacité d'éducation à la santé des utilisateurs. Les auteurs suggèrent qu'il faut former les prestataires à mieux communiquer avec les patients, à faciliter la navigation de leurs systèmes, simplifier les textes écrits, incorporer l'usage de la technologie et de la santé mobile, et utiliser des cartes d'évaluation et des listes au niveau de l'individu et du système.

DÉTERMINANTS DU COMPORTEMENT ALIMENTAIRE

Cette étude transversale examinait le rôle des facteurs de disposition personnelle (auto-discipline et estime de soi) et des facteurs de situation (distraction et perception de la variété des aliments) comme déterminants du comportement alimentaire (FEB). Des membres du personnel hospitalier (N500) du premier CHU du Nigéria ont participé à l'étude. Les résultats montrent que l'auto-discipline et l'estime de soi permettaient conjointement de prédire la valeur de FEB restrictif cognitif ($F(2,499) = 26.00$; $R2 = 0.10$; $p<.05$). Les variables conjointes de disposition personnelle permettaient également de prédire un comportement alimentaire incontrôlé ($F(2,499) = 17.41$; $R2 = 0.07$; $p<.05$), un comportement alimentaire émotionnel ($F(2,499) = 28.58$; $R2 = 0.10$; $p<.05$), et des dimensions de restriction cognitive ($F(2,499) = 35.60$; $R2 = 0.13$; $p<.05$) de FEB. L'âge (= 64.81; df = 1; $p<.05$) et le statut conjugal (= 32.74; df = 4; $p<.05$) étaient liés au FEB. Il n'y avait pas de différence significative entre la catégorie des employés et le FEB ($t = 0.75$; $df = 498$; $p > 0.05$). La distraction, la perception de la variété des aliments et l'auto-discipline produisaient un effet de triple interaction sur la consommation alimentaire incontrôlée ($F(1, 499)= 4.89$; $p<.05$). On peut en conclure que les variables de disposition et de situation sont des indicateurs de FEB comme le montre la littérature antérieure. Ces observations ont des implications sur la santé au travail et la prévention des troubles du comportement alimentaire parmi les travailleurs de santé. On souligne la nécessité d'une prévention primaire et l'affirmation de soi pour pallier la distraction et les troubles du comportement alimentaire pour le maintien de la santé et de l'efficacité sur les lieux de travail.

ANALYSE COMPAREE DE LA QUALITE DE VIE DES INSUFFISANTS CARDIAQUES TRAITES A DOMICILE OU A L'HOPITAL

Cet article présente une analyse des résultats d'une enquête menée par l'hôpital spécialisé en cardiologie sur le traitement actif de Pleven. Cette étude est centrée sur la qualité de vie, l'hospitalisation et la mortalité de patients atteints d'insuffisance cardiaque ayant déjà été traités en milieu hospitalier. Etat donnée les caractéristiques de l'étude, les patients ont été divisés en deux groupes, l'un recevant des soins de suivi continu à domicile, et l'autre ne bénéficiant pas de ce service. Au bout de douze mois, mes résultats des deux groupes ont été traités et collationnés en fonction de trois critères – la qualité de vie, les hospitalisations suivantes et la mortalité. Les résultats du groupe recevant des soins spécialisés à domicile étaient supérieurs pour les trois critères. Sur cette base, les auteurs ont conclu que les patients traités pour insuffisance cardiaque devraient recevoir des soins à domicile après leur sortie d'hôpital, ce service améliorant leur qualité de vie et abaissant le nombre d'hospitalisations subséquentes et la mortalité.

PERCEPTIONS ET EXPÉRIENCES D'UN MODÈLE DE PRESTATIONS CONJOINTES POUR FORMATION AUTO-GÉRÉE DE CLINICIENS TRAVAILLANT AVEC DES PATIENTS PORTEURS DE MALADIES CHRONIQUES DANS LE CADRE DE TROIS SYSTÈMES ÉCONOMIQUES DE SOINS DE SANTÉ AU ROYAUME-UNI

Cet article présente l'évaluation d'une étude de cas de cours de formation auto-gérés pour cliniciens traitant des patients atteints

de maladie pulmonaire obstructive chronique et dépression, dans trois centres NHS du Royaume-Uni. Ces stages faisaient partie du projet Health Foundation's Co-Creating Health Initiative et étaient assurés conjointement par un patient formé et des enseignants cliniciens. Des interviews menées sur 30 cliniciens stagiaires, quatre cliniciens formateurs et deux patients formateurs indiquent que la teneur du cours et le style pédagogique étaient appréciés de tous et les cliniciens ont déclaré faire davantage appel à leurs techniques d'auto-gestion après le stage. Des analyses des séances de consultation enregistrées sur vidéo de deux cliniciens ainsi formés ont révélé un usage restreint des compétences de co-production.

QUO VADIS? LES DÉFIS DE SANTÉ EN RUSSIE

La crise sanitaire en Fédération Russe n'est pas entièrement, ni même essentiellement enracinée dans la situation du système de santé. La mortalité et la morbidité élevées, notamment chez les hommes en âge de travailler, reflètent bien d'autres facteurs au-delà du système de santé : vieillissement de la population, urbanisation croissante, modes de vie et conduites à risques. Certes il sera nécessaire de dépenser davantage en santé publique, mais cela ne suffira pas à améliorer durablement les statistiques de santé en Russie. Il conviendrait de mettre en place une stratégie multisectorielle s'accompagnant d'accroissement des dépenses de santé et de réformes des structures pour améliorer l'efficacité et la rentabilité de l'organisation et du financement des services de santé et des prestations de santé. Toutefois, il faut dire clairement qu'améliorer la situation sanitaire est une entreprise complexe à moyen ou à long terme, à laquelle le gouvernement devrait s'attaquer vigoureusement aux niveaux fédéral et régional en tant qu'objectif social prioritaire.

HOPITAUX ENGORGES: UN PROBLEME DE GESTION HOSPITALIERE

Cet article traite de la lenteur de la hausse des admissions dans les hôpitaux, qui joue un rôle crucial dans la hausse des dépenses hospitalières. Entre autres, il évoque l'analyse particulière des problèmes de la demande induite de services hospitaliers, l'inefficacité du système de soins des patients hospitalisés pour orientation aux spécialistes, la disproportion entre les cas rapportés et les besoins de traitement, la méfiance des patients envers les secteurs inférieurs de soins de santé, l'inefficacité des soins de santé primaires en ambulatoire, l'absence de contrôle, les carences de la structure d'organisation, la stratégie et la réglementation mal conçue du NHIF (National Health Insurance Funds, Fonds national d'assurance maladie). Résoudre efficacement ces problèmes est une condition sine qua non de l'amélioration de la qualité des soins aux patients hospitalisés.

World Hospitals and Health Services 2011 Volume 47 Number 2

Resumen en Espanol

EL EFECTO COLÓN: "DESCUBRIMIENTO" DE LAS ENFERMEDADES NO TRANSMISIBLES EN LAS COMUNIDADES DONANTES

Los días 28 y 29 de abril de este año, se celebró en Moscú la Primera reunión Mundial de Ministros sobre Estilos de vida saludables y Enfermedades no transmisibles (en inglés NCD), con el fin de conseguir apoyo y disponer unas normas de política para la próxima reunión de alto nivel de las Naciones Unidas sobre las NCD, que tendrá lugar en septiembre del año en curso. Con posterioridad, la Organización Mundial de la Salud (OMS) redactó el borrador 'La Declaración de Moscú', convirtiéndose así en el epicentro mundial para la prevención y el control de las enfermedades no transmisibles, trabajando en colaboración con sus únicos clientes en los Estados Miembro, los ministerios de salud pública. Esta Declaración no tuvo en cuenta las importantes actividades en curso en los hospitales bajo la propiedad y dirección de los países en desarrollo, ni su participación clínica en la prevención y el control de las NCD en los últimos cuarenta años.

Este artículo hace un análisis de la gran preocupación mundial de los países en desarrollo por las NCD; el reconocimiento de las NCD por fuentes de absoluta confianza décadas antes de 'La Declaración de Moscú'; el papel de los hospitales al abordar este problema a pesar de carecer del apoyo de los donantes; la cantidad considerable de inversiones realizadas por organismos públicos y privados para la construcción de servicios de hospitalización y consultas externas; y la manera en que los países donantes han ignorado al sector hospitalario bien arraigado de las economías en vías de desarrollo.

LAS NCD Y LA INSTRUCCIÓN SANITARIA ELEMENTAL, ¿QUE PUEDEN HACER LOS HOSPITALES?

La instrucción sanitaria elemental sobre las enfermedades no transmisibles consiste en la capacidad del público en general para acceder, comprender y utilizar la información con miras a prevenir, tratar y controlar las enfermedades crónicas. Se ha demostrado que unos conocimientos insuficientes sobre cuestiones de la salud están relacionados con un comportamiento más arriesgado, una elección equivocada en materia de salud y una salud más precaria. Los hospitales pueden desempeñar un papel muy importante en cuanto a mejorar los conocimientos elementales del público sobre las NCD desde el principio hasta el fin del "trayecto de las NCD" desde la prevención hasta el control, mediante una instrucción adecuada a la capacidad literaria de sus usuarios. Los autores proponen adiestrar a los proveedores de servicios a comunicarse de una manera más eficaz con sus pacientes, haciendo sus sistemas más fáciles para la navegación, simplificando el material impreso, introduciendo el uso de la tecnología y el equipo sanitario móvil y, finalmente, utilizando un sistema individual de listas de control y evaluación de los resultados.

FACTORES DETERMINANTES DE LOS HABITOS ALIMENTARIOS

En esta encuesta transversal se investigó el papel de

predisposición (la autoeficacia y autoestima), y los factores de situación (la capacidad de distracción y la percepción sobre la variedad de alimentos) como factores determinantes de los hábitos alimentarios (en inglés FEB). En la encuesta participó el personal (N500) del Hospital Universitario más importante de Nigeria. Los resultados mostraron que la autoeficacia, junto con la autoestima pronostican una dimensión de moderación cognitiva de FEB ($F(2,499) = 26.00$; $R_ = 0.10$; $p<.05$). Las variables de predisposición también pronostican unas dimensiones de FEB relacionadas con: ganas incontroladas de comer ($F(2,499) = 17.41$; $R_ = 0.07$; $p<.05$; inestabilidad emocional ($F(2.499) = 28.58$; $R_ = 0.10$; $p<.05$), y moderación cognitiva ($F(2,499) = 35.60$; $R_ = 0.13$; $p<.05$). La edad ($__ = 64.81$; $df = 1$; $p<0.5$) y el estado civil ($__ = 32.74$; $df = 4$; $p<.05$) están relacionados con los factores determinantes de los hábitos alimentarios. No se encontró una diferencia considerable entre las distintas categorías de los empleados y los FEB ($t = 0.75$; $df = 498$; $p > 0.05$). La capacidad de distracción, la percepción sobre la variedad de alimentos y la autoeficacia dan lugar a un efecto de interacción tridimensional con las ganas incontroladas de comer ($F(1,499) = 4.89$; $p<.05$). Por tanto, las variables de predisposición y los factores de situación son variables predictivas de FEB como se puso en evidencia en publicaciones anteriores. Estas tienen unas consecuencias para la salud profesional y la prevención de los trastornos alimentarios entre el personal sanitario. En la encuesta se puso de relieve la necesidad de prevenir desde el principio y concienciar al paciente, con el fin de reducir la distracción y los trastornos alimentarios y conservar un buen estado de salud y la eficacia laboral.

ANALISIS COMPARATIVO DE LA CALIDAD DE VIDA ENTRE EL TRATAMIENTO DOMICILIARIO Y EL TRATAMIENTO HOSPITALARIO DE LOS PACIENTES CON INSUFICIENCIA CARDIACA

Este artículo ofrece un estudio analítico de los resultados de una encuesta dirigida por el hospital cardiaco especializado en el tratamiento activo, Pleven, que pone su atención en la calidad de vida, los ingresos hospitalarios y la tasa de mortalidad de los pacientes con insuficiencia cardiaca que han recibido anteriormente tratamiento hospitalario. Teniendo en cuenta los datos específicos de la encuesta, se dividió a los pacientes en dos grupos distintos. Uno de ellos siguió recibiendo atención postratamiento a domicilio. El otro no tuvo ningún seguimiento. Después de un año, se computaron y cotejaron los resultados de los dos grupos siguiendo los tres criterios siguientes:

la calidad de vida, los posteriores ingresos hospitalarios y la tasa de mortalidad. Los resultados notificados del grupo que siguió recibiendo el tratamiento especializado fueron muy superiores en los tres casos. En base a estos resultados, los autores concluyen que los pacientes con tratamiento para la insuficiencia cardiaca deben continuar recibiendo un tratamiento después de recibir el alta hospitalaria ya que ello mejora su calidad de vida y da lugar a menos ingresos hospitalarios y reduce la tasa de mortalidad.

LA PERCEPCION Y EXPERIENCIA DEL MODELO DE COPARTICIPACION PARA LA FORMACION EN AUTOGESTIÓN DE LOS MÉDICOS QUE DISPENSAN CUIDADOS A PACIENTES CON ENFERMEDADES DE LARGA DURACION EN TRES ECONOMÍAS DISTINTAS DEL SERVICIO DE SALUD DEL REINO UNIDO

Este artículo ofrece la evaluación de un estudio de casos prácticos sobre cursos de formación en autogestión para los médicos que dispensan cuidados a pacientes con COPD (Obstrucción crónica del pulmón) y depresión en tres establecimientos del servicio nacional de salud del Reino Unido. Estos cursos formaban parte del proyecto denominado Health Foundation's Co-creating Health Initiative y fueron impartidos por un paciente adiestrado y profesores médicos. De las encuestas realizadas entre 30 médicos presentes, cuatro profesores médicos y dos pacientes adiestrados se desprendió que el contenido del curso y el estilo de formación fueron evaluados favorablemente por los asistentes y los médicos informaron que tras los cursos de formación se produjo un uso más elevado de técnicas de autogestión. En un análisis de las grabaciones de vídeo de las sesiones se puso de relieve que el uso de conocimientos prácticos en la coproducción de dos de los médicos adiestrados era muy reducido.

¿QUO VADIS?: RETOS DEL SISTEMA DE SALUD RUSO

Las raíces de la crisis sanitaria de la Federación Rusa no radican de ninguna manera en el estado del sistema de atención de la salud del país. Los altos niveles de mortalidad y morbilidad, especialmente entre los varones en edad de trabajar, reflejan numerosos otros factores que van más allá del sistema de salud, puesto que están relacionados con el proceso de envejecimiento de la población, el desarrollo urbano y los comportamientos arriesgados. Si bien sería necesario aumentar los gastos en materia de salud, esto no sería suficiente para mejorar los resultados de salud de manera sostenible. Para ello, se requiere una estrategia aplicable a varios sectores, unida a un aumento de los gastos sanitarios y una reforma estructural encaminada a mejorar tanto la eficiencia como la eficacia de la organización de la asistencia sanitaria, la financiación y la prestación de los servicios de salud. No obstante, conviene señalar que la mejora del estado de salud es una tarea compleja, de medio a largo plazo que debería ser acometida enérgicamente por el Gobierno, no sólo a nivel federal, sino regional, comoun objetivo social prioritario.

EXCESO DE INGRESOS HOSPITALARIOS: UN ASUNTO PARA LA DIRECCION HOSPITALARIA

Este artículo aborda el insuficiente aumento en el índice de ingresos hospitalarios como un factor decisivo del creciente nivel de gastos hospitalarios. El informe se concentra en hacer un análisis particular de las cuestiones relativas a una demanda provocada de los servicios hospitalarios, el bajo nivel de eficacia del sistema de cuidados a enfermos hospitalarios en cuanto a la remisión de pacientes, la desproporción de los casos registrados en comparación con los casos con necesidad de tratamientos terapéuticos, la falta de confianza de los pacientes en los sectores secundarios de los cuidados de salud, la escasa eficacia de la atención primaria de salud en los servicios ambulatorios, y la atención ambulatoria especializada, la falta de control, la deficiencia de la estructura orgánica, una estrategia poco apropiada y una regulación improcedente del NHIF (Fondo Nacional de la Seguridad Social). Una solución eficaz de todos estos problemas es sumamente crucial para mejorar la calidad de los cuidados a enfermos hospitalizados.

Meet IHF corporate partners

is a global leader in professional services, providing award-winning food services, management of facilities, assets, and clinical technology, and uniform/career apparel to health care institutions and other businesses. In FORTUNE magazine's 2010 list of "World's Most Admired Companies," ARAMARK ranks number one in its industry, consistently ranking since 1998 as one of the top three most admired companies in its industry. ARAMARK seeks to responsibly address key issues by focusing on employee advocacy, environmental stewardship, health and wellness, and community involvement. Headquartered in Philadelphia, Pennsylvania (USA), ARAMARK's 255,000 employees serve clients in 22 countries.
Visit www.aramark.com

is the centre of a community comprised of over 15,000 players of the hospital business. Through our web platform, we integrate hospitals throughout the supply chain sector, focusing on business development and relationships. Established in 2000, in just 10 years, Bionexo was structured in Brazil, becoming the largest marketplace reference to the hospital industry and contributing significantly to the professionalization of the purchasing sector and growth of the healthcare market.
The success of this innovative business model has led to Bionexo for Latin America and Europe, where also attained leadership in addition to export technology and implement a new concept in commercial transactions of organizations. Everything happened in a short time, just like businesses are made between the companies that integrate our platforms. This makes Bionexo the largest core of the hospital sector in Brazil. Pioneering and innovation, helping thousands of companies and hospitals.
www.bionexo.com.br

is the world leader in GIS technology. On any given day, more than one million people around the world use Esri geographic information system (GIS) software to improve the way their organizations conduct business. Esri GIS solutions are becoming an integral component of health organizations in addition to nearly every other type of business and government service. By adding a geographic component to data and analysis, Esri software promotes exploring, analyzing and visualizing massive amounts of information according to spatial relationships. Since most health and human service problems facing the world today exist in a location-based context, geography can play a major role in helping health professionals understand health dynamics and the spread of disease. Health surveillance systems are used to gather, integrate and analyze health data; interpret disease transmission and spread; and monitor the capabilities of health systems. GIS is the enabling technology to spatially relate much of the information, making it a powerful tool for identifying, tracking and responding to disease patterns and health service needs. Esri software is extensively used by health organizations throughout the world, including the US Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), 119 national health ministries, and over 500 hospitals. For more information, contact Ann Bossard, abossard@esri.com.
www.esri.com/health

HCA
London's number 1 private hospital group

owns the Capital's six leading private hospitals all based in central London and each with an international reputation for the highest standards of care. They are: The Wellington – the largest private hospital in Europe, The London Bridge Hospital, The Harley Street Clinic, The Portland Hospital for Women and Children, The Lister Hospital and The Princess Grace Hospital. HCA also has four outpatient and diagnostic centres – soon to be six – a blood and bone cancer treatment joint venture with the NHS at University College Hospital, The London Gamma Knife Centre, another joint venture with the NHS at St Bartholomew's Hospital and Harley Street at Queen's, a private patient cancer centre at the NHS Queen's Hospital in Romford.

The six HCA hospitals treat around 300,000 patients per year. They also specialise in the most complex medical procedures including cardiac care, liver transplantation, inter cranial surgery and complex cancer care. The HCA CancerCare network, for example, is the largest provider of cancer care in the UK outside the NHS. Uniquely, HCA has its own clinical trials unit based in Harley Street in central London. Medical teams in HCA are involved in research programmes aimed at finding new treatments in areas such as heart disease and cancer. In recent years HCA has invested around £250 million in capital expenditure including new diagnostic and treatment technology. As an example, HCA has recently installed at The Harley Street Clinic, the revolutionary CyberKnife robotic radiotherapy machine, which is able to target previously untreatable tumours. It is the first machine of its kind in the UK.
www.hcainternational.com

TRANE
Ingersoll Rand

a business of Ingersoll Rand – the world leader in creating and sustaining safe, comfortable and energy efficient environments – creates ideal environments of care for healthcare organizations all over the globe. Our products, services and solutions optimize the link between the physical environment to patient outcomes, staff satisfaction/productivity and the bottom line.

Trane/Ingersoll Rand solutions optimize healing environments with a broad portfolio of energy efficient heating, ventilating and air conditioning systems, building and contracting services, parts support and advanced controls for healthcare buildings. Our market-leading products also include electronic and biometric access control systems; time and attendance and personnel scheduling systems; mechanical locks and portable security, door closers and exit devices, steel doors and frames, architectural hardware and technologies and services for global healthcare markets.
www.Trane.com and www.ingersollrand.com

Johnson Controls

uses its 125 years of experience to help healthcare organizations create comfortable, safe and sustainable healing environments while providing measurable results. By utilizing our expertise in energy and sustainability, facilities, building and technology infrastructure, healthcare organizations can improve their financial results, the environment of care and their standing in the community. Johnson Controls provides design assist and construction management, funding solutions, network integration solutions for clinical and non-clinical systems, energy management and central utility plants, operations support and best practices, systems maintenance and facility management services. Johnson Controls helps healthcare organizations create comfortable, safe and sustainable healing environments while providing measurable results.
www.johnsoncontrols.com

Medtronic

MEDTRONIC is the global leader in medical technology- alleviating pain, restoring health, and extending life for people with chronic conditions around the world. Medtronic develops and manufactures a wide range of products and therapies with emphasis on providing a complete continuum of care to diagnose, prevent and monitor chronic conditions. Each year, Medtronic therapies help more than seven million people.

Founded: April 29, 1949 in Minneapolis, Minnesota, USA, by Earl E. Bakken and Palmer J. Hermundslie.
Financial: Revenue for the year ended April 24, 2009: $14.6 billion. New York Stock Exchange ticker: MDT.
For further information please visit www.medtronic.com

PHILIPS

sense and simplicity

ROYAL PHILIPS ELECTRONICS OF THE NETHERLANDS (NYSE: PHG, AEX: PHI) is a diversified health and well-being company, focused on improving people's lives through timely innovations. As a world leader in healthcare, lifestyle and lighting, Philips integrates technologies and design into people-centric solutions, based on fundamental customer insights and the brand promise of "sense and simplicity". Headquartered in the Netherlands, Philips employs 119,000 employees in more than 60 countries worldwide. With sales of EUR 25.4 billion in 2010, the company is a market leader in cardiac care, acute care and home healthcare, energy efficient lighting solutions and new lighting applications, as well as lifestyle products for personal well-being and pleasure with strong leadership positions in flat TV, male shaving and grooming, portable entertainment and oral healthcare. News from Philips is located at www.philips.com/newscenter.

GE Healthcare's Performance Solutions business partners with hospitals and health systems across the globe to help improve their overall performance. The business provides knowledge solutions to reduce unnecessary waste - which comes in three forms (1) underutilization of resources (2) unintended clinical variation (3) and fragmented care delivery - and create safer more efficient patient care. Performance Solutions leverages GE's operational improvement tools and advisory capabilities with GE Healthcare's clinical and technological capabilities, providing a unique combination of advisory, technology and healthcare expertise. The business splits its global headquarters between Barrington, United States and Buc, France.
Visit www.gehealthcare.com to learn more.

Signium International

60TH ANNIVERSARY · 1951-2011

THE AMERICAS · EUROPE/MIDDLE EAST/AFRICA · ASIA PACIFIC

Signium International truly is a global executive search firm.

With more than 40 offices spread across nearly 30 countries, Signium International's network of search consultants offers local healthcare market knowledge with a global reach. Our consultants cover the globe like no other firm. When you choose Signium International to search for your next CEO, CFO, or any other senior management member, you'll find we are able to recruit from all over the world, while being mindful of the specific needs of your organization, community and patients.

Our consultants actively engage and advise throughout the entire search process – we're there from the initial site visit all the way through the first months of the winning candidate accepting the position. Signium International is effective in finding the right executive quickly and efficiently because we collaborate easily with our colleagues around the world. Having local knowledge of the healthcare market, culture and business practices of your country can't be substituted with having solely a large team of consultants in the United States. With offices throughout the Americas, Europe, Middle East, Africa, and Asia Pacific, we are confident we can best serve your needs.

With more than six decades of experience, Signium International's consultants have an in-depth understanding of the various facets of the healthcare industry: integrated healthcare systems and hospital systems; hospitals (independent, community, academic, government, nonprofit, for-profit, start-up, etc.); physician practice groups; medical schools; medical associations; boards; and more. For more information, please contact: Email: ltyler@signium.com

IHF Governing Council 2009-2011

THE EXECUTIVE COMMITTEE

President
Dr JOSE CARLOS DE SOUZA ABRAHAO
President
CONFEDERACAO NACIONAL DE SAUDE (CNS)
SRTVIS Quadra 701,
Conjunto E
Edificio Palacio do Radio 1
Brasilia DF, CEP 70340-906
BRAZIL

President-Designate
Mr THOMAS C DOLAN
CEO
AMERICAN COLLEGE OF HEALTHCARE EXECUTIVES
One North Franklin Street
Suite 1700
Chicago, Illinois 60606-3491
UNITED STATES OF AMERICA

Immediate Past Presidents
Dr IBRAHIM A AL ABDULHADI
Assistant Undersecretary for Health Insurance Affairs
MINISTRY OF HEALTH
State of Kuwait
PO Box 5, PIN Code 13001
KUWAIT

Mr GERARD VINCENT
Délégué Général
FEDERATION HOSPITALIERE DE FRANCE
1 bis Rue Cabanis
75014 Paris
FRANCE

Treasurer
Dr LEKE PITAN
Former Commissioner for Health – Lagos State
House G40C, Road 2
Victoria Garden City, Lagos
NIGERIA

Dr JUAN CARLOS LINARES
Director
CAMARA ARGENTINA DE EMPRESAS DE SALUD (CAES)
Tucuman 1668, 2 Piso
Buenos Aires C.P. 1050
ARGENTINA

Prof HELEN LAPSLEY
Research Professor
CENTRE OF NATIONAL RESEARCH ON DISABILITY & REHABILITATION MEDICINE
University of Queensland
3 Keston Avenue
Mosman, Sydney NSW 2088
AUSTRALIA

Prof GUY DURANT
Administrateur général
CLINIQUES UNIVERSITAIRES SAINT-LUC
Avenue Hippocrate 10
B – 1200 Bruxelles
BELGIUM

Dr GEORG BAUM
Chief Executive
GERMAN HOSPITAL FEDERATION
Wegelystrasse 3
10623 Berlin
GERMANY

Dr LAWRENCE LAI
Senior Advisor
HONG KONG HOSPITAL AUTHORITY
Room 1003, Administration Block
Queen Mary Hospital
102 Pokfulam Road
HONG KONG (SAR)

Dr MUKI REKSOPRODJO
International Relations
INDONESIAN HOSPITAL ASSOCIATION (IHA) - PERHIMPUNAN RUMAH SAKIT SELURUH INDONESIA (PERSI)
c/o Jl.H.R.Rasuna Said Kav.C-21 Kuningan Jakarta Selatan 12940 INDONESIA

Dr TSUNEO SAKAI
President
JAPAN HOSPITAL ASSOCIATION
13-3 Ichibancho, Chiyodaku, Tokyo
JAPAN

Dr TAI-CHUN YOO
President
KOREAN HOSPITAL ASSOCIATION
35-1, Mapo-Dong, Mapo-Gu, Seoul
KOREA

Dr ERIK KREYBERG NORMANN
Project Director
Department of Hospital Services
NORWEGIAN DIRECTORATE OF HEALTH
P.O.Box 7000 St. Olavs plass, N-0130 OSLO, NORWAY

Prof CARLOS PEREIRA ALVES
Vice Chair
ASSOCIACAO PORTUGUESA PARA O DESENVOLVIMENTO HOSPITALAR
(Portuguese Association for the Hospital Development)
Av. António Augusto de Aguiar, 32-4º
1050-016 Lisboa
PORTUGAL

Dr THABO LEKALAKALA
Director - Hospital Management and Planning
DEPARTMENT OF HEALTH
Street Hallmark Building
231 Proes Street
001 Pretoria
SOUTH AFRICA

Dr DELON WU
President
TAIWAN HOSPITAL ASSOCIATION
25F, No29-5
Sec. 2, Jung jeng E. Road
Danshuei Township, Taipei County
TAIWAN

Mrs ALISON KANTARAMA
President
UGANDA NATIONAL ASSOCIATION OF HOSPITAL ADMINISTRATORS (UNAHA)
Mulago Hospital
PO Box 7051, Kampala
UGANDA

Mr ABDUL SALAM AL-MADANI
President
INDEX HOLDING
Dubai Healthcare City
Block B, Offices 203 – 303
P.O.Box 13636, Dubai
UNITED ARAB EMIRATES

SIR KEITH PEARSON
Chairman
NHS CONFEDERATION
29, Bressenden Place
London SW1E 5DD
UNITED KINGDOM

2011 Events

IHF

37th World Hospital Congress
8-10 November 2011, Dubai, United Arab Emirates
Theme: "Healthcare in a Changing World: Overcoming the Challenges"
Email: Sheila@ihf-fih.org; siddarth.nanthur@index.ae Website: http://www.ihfdubai.ae

MEMBERS

FRANCE

36ème Congrès de la FEHAP
October 5, 6 and 7, 2011, la Cité des Congrès de Lyon, Lyon
For more information: http://congres.fehap.fr/

SWITZERLAND

4th National Hospital Day
24 September 2011, Berne
Theme: "Le nouveau rôle des hôpitaux, cliniques et institutions dans la chaîne des soins
http://www.hplus.ch/fr/servicenav/evenements/journee_nationale_des_hopitaux/

Congrès H+ 2011
3 November 2011, Hôtel Bellevue Palace, Berne
For more information: http://www.hplus.ch/fr/servicenav/evenements/congres_h/

COLLABORATIVE

SINGAPORE

Hospital Management Asia 2011 (HMA2011)
7 & 8 September 2011, Singapore
For more information: http://hospitalmanagementasia.com/

GERMANY

8th MCC Congress, Strategic Options for the Hospital Market, collaborative event with IHF
September 22-23, 2011, Berlin, Germany.
For more information: www.hospitalworld.info

2012

MEMBERS

USA

Congress on Healthcare Leadership
19-22 March 2012, Hyatt Regency Chicago, Chicago, Illinois
For more information: http://ache.org/Congress

2013

IHF

38th World Hospital Congress
18-20 June, Oslo, Norway
Future Health Care: The Possibilities of new technology
For more information: http://oslo2013.no Email: Sheila@ihf-fih.org

8TH MCC CONGRESS

MCC hospitalworld 2011

Frankfurter Allgemeine
ZEITUNG FÜR DEUTSCHLAND

MCC®

International Hospital Federation

Strategic Options for the Hospital Market

Keep your Knowledge at the State of the Art! Register Now!

September 22 and 23, 2011 in Berlin, Germany

With Simultaneous Translation

- **Emerging Markets: Gulf Region (Saudi-Arabia, Dubai) • India • China • Russia • Brazil**
- **Management of Increasing Financial Pressure – Opportunities and Threats in a Highly Competitive Environment**
- **The Future Role of E-Health and IT for the Hospital Market – Integrated Solutions for Patients**
- **Hospital Benchmarking as Competitive Advantage – Strategies for a Successful Quality- and Riskmanagement**
- **Reengineering and Process-Optimizing as Tools to Improve Safety, Quality and Hygiene**
- **Globalization of Health Services – Successful Strategies of Internationalization**
- **Quality and Accreditation in Health Care**


Dr. Jose Carlos de Souza Abrahao President CONFEDERACAO NACIONAL DE SAUDE & President, International Hospital Federation (IHF), Brazil


Dr. Abdulaziz Al Shamekh CEO, Sultan Bin Abdulaziz Humanitarian City, Saudi Arabia


Sergej Anoufriev CEO, St. Petersburg Association of Clinics, Russia


Dr. Francisco Roberto Balestrin de Andrade Vice President of the Advisory Board, Brazilian Association of Private Hospitals, Brazil


Dr. Dr. Thomas Behrenbeck Consultant, Associate Professor of Medicine, Mayo Clinic, USA


Eric De Roodenbeke CEO, International Hospital Federation (IHF), France


Dr. Szabolcs Dorotovics Managing Director, Johns Hopkins International, LLC, USA


Salah Fakhouri CEO, Health Management, Dubai


Prof. Dr. Thomas Ittel CEO and Medical Director, University Hospital Aachen, Germany


Matt James Chief Executive, H5 Private Hospitals Alliance, United Kingdom


Prof. Farit Kadyrov Deputy Director, Central Institute of Public Health, Russia


Dr. Gillian Leng Deputy Chief Executive, National Institute for Health and Clinical Excellence, UK


Tony McNamara CEO, Cork University Hospital, Ireland


Filippo Monteleone Director General, Général de Santé, France


Stephen O'Brien Chairman, Barts and The London NHS Trust, UK


Prof. Dr. Dr. h.c. Fried Oelschlegel COO, Healthcare Development Holding Co., Saudi Arabia


The Hon. Arthur T. Porter P.C. MD, Director General and CEO, McGill University Health Centre, Montreal, Quebec, Canada


Dr. B. K. Rana Deputy Director, NABH, India


Johnny Van der Straeten CEO, Antwerp University Hospital, Belgium


Prof. Shan Wang President, Peking University People's Hospital, China


Dr. med. Helmar Wauer Hospital Business Director, Charité Berlin, Germany


Dr. Reinhard Wichels Manager of the Hospital Insitute, McKinsey & Company Inc., Germany

REGISTRATION

MCC hospital world[2011]

Strategic Options for the Hospital Market

September 22 and 23, 2011 in Berlin, Germany

MCC · Scharnhorststr. 67a · 52351 Düren

P PREMIUMADRESS
RETOURE
INFOPOST

Who should not miss this congress:

- Decision makers within the health industry
- Hospital directors, administrative heads and medical directors
- State and private health insurance companies
- Management consultants for hospitals and insurance companies
- IT-service providers, solution providers for hospitals
- Fund managers, investment companies
- Providers of medical technology and medical information systems
- Union representatives and medical spokesmen

3 good reasons to participate:

The two-day congress **MCC hospital world** [2011] will provide a comprehensive overview of national and international issues effecting hospitals. You will receive fundamental insights into the activities of major market players. Use this opportunity to talk with leading international experts about chances and risks in the international health industry.

Delegate Registration Form

☐ **Yes, I/we want to take part in this congress.**

☐ **Buy 2 - Get 3!** Yes, I/we will register three individuals from one company and we will receive a free ticket for the third person.

☐ Please send me more information about opportunities for cooperation/sponsoring.

☐ Unfortunately, I cannot take part in the above mentioned event, but I would like to purchase a copy of the abstracts for 295.- €.
(VAT and delivery not included. Shipment is not intended for purposes of examination and obligates the recipient to accept the documents)

1 Last name _____ First name _____

Position _____ Department _____

2 Last name _____ First name _____

Position _____ Department _____

3 Last name _____ First name _____

Position _____ Department _____

Company _____

Street _____

Postcode _____ City _____

Phone _____ Fax _____

E-Mail _____

Date _____ Signature and company stamp _____

Organizer: **MCC - The Communication Company**
Scharnhorststr. 67a, 52351 Dueren, Germany
Phone: +49 (0)2421 12177-0
Telefax: **+49 (0)2421 12177-27**
E-Mail: **mcc@mcc-seminare.de**
Internet: **www.mcc-seminare.de**

Congress Fee:

The fee for participation in the **two-day congress** incl. congress abstracts, lunch, dinner invitation, refreshments and small snacks during the breaks: **€ 1895.-**

Special rate for hospital employees and registered doctors for the **two-day congress**: **€ 795.-** plus VAT.

Participants from Eastern Europe and developing countries (named in the WHO-List) will be enabled to participate through substantially reduced prices. (VAT not included)

Conditions of participation:

Please simply complete the registration form and fax or send it to MCC as soon as possible. You can also register directly by E-Mail at mcc@mcc-seminare.de. Once your registration has been received by MCC in writing, we will send you a confirmation and invoice immediately – given that space is still available. Otherwise you will be informed promptly. Payment is accepted by bank transfer or by check.

Buy 2 - Get 3! Should at least three individuals from one company take part in the congress, we provide a free ticket for the third person.

Please note: You may only participate in the congress if the congress fee is paid in advance or at the congress. Cancelations must be made in written form. If you do not attend the congress or cancel your participation after August 22, 2011 the full fee will be due and cannot be refunded. If you cancel your participation up to and including August 22, 2011, we will charge an administrative fee of € 130,- (VAT not included). You may of course send a substitute. Please inform us about your substitute's name at least three days prior to the congress. Our general terms and conditions apply and are available upon request.

Date and venue:

September 22 and 23, 2011 in Berlin, Germany

Ellington Hotel Berlin
Nürnberger Str. 50-55
10789 Berlin, Germany
Phone: +49 (0)30 683 150
Fax: +49 (0)30 683 155 555

Hotel Accommodation: A limited number of rooms at a special rate is available. Please book your accommodation promptly. Ask for special rates and refer to the reservation code "MCC". For additional information about the hotel, rooms or hotel services, please contact the hotel directly. Accommodation rate: € 138.- per night/single room.

how-2.0m

Please pass this invitation also to interested colleagues.

FREE Hotel Room
for one night
(if two overseas delegates register from the same hospital and twin share)

Hospital Management Asia 2011

10TH YEAR

THE PREMIER LEARNING CONFERENCE FOR HOSPITAL MANAGERS

September 7 & 8, 2011 • Resorts World Convention Centre • Singapore

Learn from the experts

Achieve professional development

Advance your healthcare career

Presented in cooperation with

Joint Commission International

With the support of

MINISTRY OF HEALTH SINGAPORE

SINGAPORE EXHIBITION & CONVENTION BUREAU

JOHNS HOPKINS MEDICINE INTERNATIONAL

International Hospital Federation

ASIAN HOSPITAL FEDERATION

Official Industry Partners

UBM Medica

AUSTCO

Conference Partners

ASTRON Hospital & Healthcare Consultants Private Limited • Chinese Hospital Association • Hoan My Medical Corporation
The Ho Chi Minh City Medical Association and The Medical Practitioner Society of Ho Chi Minh City • Hong Kong Hospital Authority
Indian Healthcare Quality Forum • Indonesian Hospital Association • Private Hospitals Association of the Philippines • Quality Council of India (QCI)

Cooperating Partners

Avanti Espresso Company
Spa Republic

Media Partners

ACN Newswire • Medical Products Asia
BusinessWorld • Vietnam Business Forum • MIMS
Medical Progress • Medical Tribune • MJN e-News
Asia Pacific Journal of Health Management

PR Partners

Weber Shandwick
Creative Crest (India) • Masso PR (Vietnam)
Integrated Public Relations (Malaysia)
PR Society of Indonesia

Visit us: www.hospitalmanagementasia.com | Phone (632) 8468339 • Fax: (632) 8126288 | Email: hma@exedraevents.com

Like us on facebook.com/pages/Hospital-Management-Asia

follow us twitter.com/HMAsia




IHF2013OSLO

FUTURE HEALTH CARE

The possibilities of
new technology.

oslo2013.no

International
Hospital
Federation