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Geneva, 14 July 2023

The Permanent Mission of the Kingdom of Saudi Arabia to the United Nations Office and Other International Organizations at Geneva presents its compliments to the World Health Organization (WHO), and has the honor to attach herewith a letter from Minister of Health Dr. Fahad Aljalajel to Dr. Tedros Ghebreyesus, Director General of World Health Organization, regarding the candidature of Professor Hanan H. Balkhy to the post of Regional Director of the Eastern Mediterranean Office.

The Permanent Mission of the Kingdom of Saudi Arabia avails itself of this opportunity to renew to the World Health Organization, the assurance of its highest consideration.



Director-General

World Health Organization - Office of the Legal Counsel Office 7058

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[Emblem of the Ministry of Health]

Excellency Dr Tedros Adhanom Ghebreyesus (*May God preserve him*)

Assalamu alaikum wa rahmatu Allah wa barakatuh

(Peace and God's mercy and blessings be upon you)

First of all, I would like to express to you my thanks and appreciation for your outstanding leadership of the World Health Organization, particularly under the difficult circumstances experienced by the world. I also appreciate the active role that the WHO has been playing to support and assist the Eastern Mediterranean region in addressing various challenges, including the Covid-19 pandemic.

By this letter, I would like to submit an official proposal, on behalf of the Government of the Kingdom Saudi Arabia, to nominate Dr Hanan Hassan Balkhy for the position of Regional Director of the WHO Eastern Mediterranean Regional Office. As you are aware, Dr Hanan Balkhy has been serving as the Assistant Director-General for the Antimicrobial Resistance at the WHO headquarters, since 2019. Prior to that, Dr Hanan had a distinguished career in medicine as well as in medical and health-related research, with special focus on public health challenges.

Dr Hanan Balkhy has a strong background in technical and public health sectors at the national, regional and international levels. At the national level, Dr Hanan was the first Executive Director for Infection Prevention and Control at the Saudi Ministry of National Guard. At the regional and international levels, Dr Hanan has been a leading expert who provided important guidance with a significant impact on the WHO Eastern Mediterranean Office and WHO Headquarters. For more than ten years, she successfully led the Gulf Cooperation Council Centre for Infection Control (GCC-IC) and the WHO Collaborating Centre on Infection Prevention and Control and Antimicrobial Resistance. This experience has culminated in her appointment as the first Assistant Director-General for the Antimicrobial Resistance at the WHO.

All information required in the standard form, including the candidate's qualifications and experience is attached in the annex to this letter, in line with decision EM/RC59/13.

Please accept the assurances of my highest consideration.

Minister of Health

Fahd bin Abdurrahman Al-Jalajel

[Signature]

Dr. Hanan Hassan Balkhy

Summary

I am a physician with 25 years of substantive experience in public health, community and child health, and communicable diseases including significant expertise in managing outbreak emergencies.

I have a proven track record in developing and advancing national healthcare programs in several areas including the strengthening of their health system underpinnings, especially work force education and development, and expanding quality-controlled services. That included exercising leadership through membership of senior management teams to formulate and implement critical national health policies. Alongside, I established a highly commended research program to advance public health from a multi-sectoral 'one health' perspective that linked human, animal, and environmental health.

Recognising the strong inter-connectedness of national and international health ambitions, I am committed to fostering effective multilateral co-operation in regional and global health. That has taken me to serve on numerous committees and initiatives concerned with sharing expert knowledge and practical expertise to tackle critical health concerns across nations. For example, I set-up and led the first multisector working group for Gulf Cooperation Countries on antimicrobial resistance.

My practical experience at community and national level has provided a strong foundation for effectiveness in the international sphere. Currently, as Assistant Director General at World Health Organization (WHO) headquarters in Geneva, I serve in its highest management team with associated global leadership, strategic direction, and advocacy responsibilities. That also means engaging in partnerships with governments, inter-governmental bodies, philanthropic foundations, and multilateral United Nations and International Financial Institutions.

I am familiar with all parts of the WHO network, including its regional and country offices. That has included the challenges of developing new programmes and promoting institutional reforms.

I am passionate about my work and having operated extensively across diverse, multi-cultural settings, I appreciate the important benefits of inclusive and participative approaches to handling complex or difficult circumstances. My leadership style combines openness and transparency. I have good communication skills and prefer problem-solving and conflict resolution through respectful dialogue and team building. At the same time, I am results-focused, and decisive when difficult choices have to be made to deliver the best outcomes for which I am responsible.

CURRENT ROLE

Assistant Director-General for Antimicrobial Resistance, WHO HQ, Geneva, since May 2019.

A member of WHO top management team and served in several concurrent roles: Assistant Director-General *a.i.* for Access to Medicines and Health Products (Dec 2022 – May 2023) and, in relation to the Covid-19 pandemic, WHO Lead for ACTA-diagnostic pillar (March 2020 – current).

EDUCATION AND TRAINING:

- 1985-1992 **Medical Degree.** King Abdul-Aziz University Medical School. (Degree: M.B., Ch.B.)
Faculty of Medicine and Allied Sciences. Jeddah, Saudi Arabia
- 1993-1994 **Pediatric Internship.** Massachusetts General Hospital, Harvard Medical School, Boston,
MA, USA
- 1994-1996 **Pediatric Residency.** Massachusetts General Hospital, Harvard Medical School, Boston
MA, USA
- 1996-1999 **Pediatric Infectious Disease Fellow.** The Cleveland Clinic Foundation, & Rainbow
Babies and Children's Hospital, Case Western Reserve University School of Medicine,
Cleveland, Ohio, USA

OTHER QUALIFICATIONS:

- 1996 American Board of Pediatrics
- 2003 American Board of Pediatric Infectious Diseases
- 2004 Re-certification American Board of Pediatrics
- 2003 Certification Board of Infection Control and Epidemiology (CBIC)
- 2009 Masters Medical Education. King Saud bin Abdulaziz University for Health Sciences,
Riyadh, Saudi Arabia

CLINICAL APPOINTMENTS:

- 2017-2019 **Professor,** King Saud bin Abdulaziz University for Health Sciences. Riyadh, Saudi Arabia
- 2011-2017 **Associate Professor,** King Saud bin Abdulaziz University for Health Sciences. Riyadh,
Saudi Arabia
- 2013-2019 **Chairman.** Infectious Disease Research Department, King Abdullah International Medical
Research Center, King Saud bin Abdulaziz University for Health Sciences. Riyadh, Saudi
Arabia
- 2009-2019 **Executive Director.** Infection Prevention and Control Department, King Abdul Aziz
Medical City. Riyadh, Saudi Arabia
- 2010-2019 **Director.** Gulf Cooperation Center for Infection Control (GCC-IC), Ministry of National
Guard Health Affairs. Riyadh, Saudi Arabia
- 2010-2019 **Director.** WHO Collaborating Center for Infection Control and Antimicrobial Resistance,
Ministry of National Guard Health Affairs. Riyadh, Saudi Arabia
- 2012-2015 **Adjunct Associate Professor,** Department of Epidemiology, Emory University. Atlanta
Georgia, USA
- 2007-2013 **Team Leader.** Research Laboratory for Infectious Disease, King Abdullah International
Medical Research Center, King Saud bin Abdulaziz University for Health Sciences.
Riyadh, Saudi Arabia
- 2007-2009 **Section Head.** Research Promotion and Education, King Abdullah International Medical
Research Center, King Saud bin Abdulaziz University for Health Sciences. Riyadh, Saudi
Arabia
- 2001-2019 **Consultant.** Pediatric Infectious Diseases, Department of Pediatrics, King Abdul Aziz
Medical City. Riyadh, Saudi Arabia
- 2001-2006 **Hospital Epidemiologist.** Infection Prevention and Control Program, King Abdul Aziz
Medical City. Riyadh, Saudi Arabia
- 1999-2002 **Clinical Associate.** Pediatric Infectious Disease, Massachusetts General Hospital
Boston Massachusetts, USA

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- 1999-2001 **Director.** Infection Prevention and Control Department, King Khalid National Guard Hospital. Jeddah, Saudi Arabia
- 1996-1999 **Research Associate.** Department of Geographic Medicine, University Hospitals, Case Western Reserve University. Cleveland Ohio, USA
- 1999-2001 **Consultant.** Pediatric Infectious Diseases, King Khalid National Guard Hospital. Jeddah, Saudi Arabia
- 1993-1996 **Clinical Fellow in Pediatrics.** Harvard Medical School. Boston MA, USA

KEY RESEARCH HIGHLIGHTS

Leading Infectious Disease Research while Chairing the Infections Disease Research Department at KAIMRC (2007-2019):

- Establishing the Infectious disease research unit.
- Established the phase 1 clinical trial team to conduct MERS CoV vaccine studies.
- Established the vaccine trial unit collaboration with the Ministry of Environment, Water and Agriculture.

AWARDS AND HONORS:

- 2019 Princess Noura Award for Women Leadership in Science
- 2017 ESCMID Fellow
- 2013 Senior Research Award, King Abdullah International Medical Research Center (KAIMRC), 2013. Riyadh, Saudi Arabia
- 2012 International Investigator Award. IDweek. San Diego California, USA
- 2010 Recipient of the 1st SHEA-APIC Partnership Award, Atlanta. (On behalf of the Infection Prevention & Control Department of the NGH)
- 2009 Research Award, King Abdullah International Medical Research Center (KAIMRC), 2009
- 2004 Best Poster Award, Society for Healthcare Epidemiologists of America (SHEA) annual meeting, 2004
- 1998 Fellows Travelers Award by IDSA, 1998
- 1998 Fellows Travelers Grant Award by ICAAC, 1998
- 1991 Honorary Student in the Medical School graduating class of 1991. King Abdulaziz University. Jeddah, Saudi Arabia
- 1991 First Degree Honors, Faculty of Medicine, King Abdul-Aziz University School of Medicine. Jeddah, Saudi Arabia
- 1988 Student Award of Anatomy and Embryology. King Abdul-Aziz University School of Medicine. Jeddah, Saudi Arabia

INTERNATIONAL ENGAGEMENTS:

I. World Health Organization (WHO):

- Member Regional Expert Committee for the Development of a Patient Safety Friendly Hospital, WHO-EMRO
- Member Consultation Meeting on Strategic Guidance for Control of Emerging Infectious Diseases with Zoonotic Origin, EMRO/WHO
- Member Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR), WHO
- Member Consultation to Promote Infection Prevention and Control Standards in the Eastern Mediterranean Region, EMRO/WHO

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Member	Consultation meeting on outbreak alert and response network in the Eastern Mediterranean region, EMRO/WHO
Member	WHO Strategic and Technical Advisory Group on Antimicrobial Resistance (AMR-STAG:2013-2016/first term)
Member	Consultant Roaster (2015-2019), WHO.
Member	International Health Regulations Review Committee (IHR-RC) (2015-2016), WHO.
Member	External reviewer of the new WHO guidelines on Core Components for IPC programs (2016), WHO
Member	Guideline Development Group for Surgical Site Infection prevention, WHO
Member	EMR Office International Health Regulation Commission, WHO-EMRO
Member	The Interagency Coordination group on Antimicrobial Resistance (UN/WHO ad hoc committee); 2017
Member	STAG Infectious Hazards Committee, WHO (2017-onwards)
Member	Advisory committee on role of vaccines against AMR (2019-2020)
Reviewer	Infection Control Core Capacities Guidelines working group, WHO.

II. Society for Healthcare Epidemiology of America (SHEA):

Member	SHEA External Affairs Advisory Committee (2010-2014)
Member	International Councilor (2016-2019)
Member	External Affairs Advisory Committee (2016-2019)
Member	Decennial scientific program committee (2018-2020)

III. Association for Practitioners in Infection Control (APIC):

President	Saudi APIC Chapter
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IV. Others:

Member	ECCMID Organizing Committee (an International committee for 2009 meeting)
Member	ReACT Conference, 6-8 September 2010, Uppsala, Sweden
Member	Joint Commission Central-Line Associated Blood Stream Infection (CLABSI) Technical Advisory Panel, 2011-2013
Member	Organizing Committee IDSA/ID week 2012 conference
Member	Scientific meeting and abstract reviewing member for the second International Conference on Prevention and Infection Control, Geneva Switzerland ICPIIC-2013
Member	ESCMID Scientific Affairs Subcommittee SAS (2013-2016)
Member	Scientific meeting member for the third International Conference on Prevention and Infection Control, Geneva Switzerland ICPIIC-2015
Member	ECCMID 2017 conference abstract review committee

NATIONAL COMMITTEES (SAUDI MINISTRY OF HEALTH)

Chair	National Antimicrobial Resistance Committee-Infection Control subcommittee (AMR-ICP)
Member	National Antimicrobial Resistance Committee (AMR)
Member	National AMR-Awareness subcommittee
Member	National AMR-Stewardship subcommittee
Member	National Immunization Committee

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Member	National Infection Control Committee
Member	The Supervisory Committee for establishing the National Public Health Program
Member	National Infectious Diseases Committee
Member	Scientific Committee on Strategic Planning for Influenza H1N1
Member	Novel corona virus working group, WHO and Saudi Ministry of Health
Member	Saudi Centers for Disease Control (board member since its founding (2009-2016)
Member	Global Health Security Agenda and IHR advisory committee

SAUDI MINISTRY OF NATIONAL GUARD HEALTH AFFAIRS (MNGHA) COMMITTEES

Chair	Corporate Emerging Pathogens Committee
Chair	Corporate Infection Control Committee
Chair	Corporate Antimicrobial Committee
Chair	Pre-employment Committee
Chair	Pediatric Well Baby Committee
Chair	Pediatric Research Committee
Chair	Research Education Subcommittee
Chair	Task Force on Central Sterile Supply Department
Co-Chair	Pediatric Quality Improvement (Mortality) Committee
Co-Chair	College of Medicine Research Committee Meeting, KSAU-HS
Co-Chair	Medical Credentialing, Privileging & Promotion Committee
Co-Chair	Corporate Outbreak Committee
Co-Chair	Regional Outbreak Committee
Member	Corporate Health Affairs Corporate Safety Committee
Member	Corporate Quality and Patient Safety Committee
Member	Corporate Pharmacy and Therapeutics Committee
Member	Medical Practice Review Committee
Member	College of Medicine Council Committee
Member	College of Medicine Faculty Development Committee
Member	Retrospective Study Research Sub-Committee
Member	Sick Leave Committee
Member	QI Committee
Member	CME Committee, Pediatric Department
Member	Pediatric Community Education Committee
Member	Pediatric Morbidity Committee
Member	Quality Management Regional Committee
Member	College of Medicine Faculty Development Committee, KSAU-HS
Member	College of Medicine Council Committee, KSAU-HS
Member	College of Medicine Research Committee Meeting, KSAU-HS
Service Chief	Ward-9

SOCIETY MEMBERSHIPS:

1994	Member, American Academy of Pediatrics
1995	Fellow, American Academy of Pediatrics
1996	Member, Pediatric Infectious Disease Society
1998	Member, Infectious Disease Society of America
1998	Member, American Society of Microbiology
2007	European Society for Clinical Microbiology and Infectious Diseases

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PERSONAL:

Born 1966, Married.

Citizen of the Kingdom of Saudi Arabia.

Languages: fluent in Arabic and English.

My hobbies include reading and travelling, and outdoor activities like hiking and skiing.

PUBLICATIONS

I have published over 155 academic papers, contributed chapters to five books, and served as editor and reviewer to several prestigious journals. The full list of my publications is in the annex, or may be accessed via this google drive link:

[Prof. Hanan Balkhy's Publications - Google Drive](#)

Annex: Publications of Dr Hanan Balkhy

Editorial:

2009-2012 Associate Editor, Journal of Infection and Public Health
2012-2019 Editor-in-Chief, Journal of Infection and Public Health
2005-2019 Selected reviewer services: Journal of Infection, Infection Control and Hospital Epidemiology, American Journal of Infection Control, and International Journal of Infectious Diseases

Book Chapters:

1. **Balkhy HH.** Trematodes. Rudolph's Textbook of Pediatrics. 21st edition. 2002; pp:1113 – 1117.
2. Kattan RF and **Balkhy HH.** Reading skills. Chapter 7. International Handbook of Medical Education: A Guide for Students. Sage Publications Asian Specific PTE Ltd. First edition; 2012.
3. Kattan RF and **Balkhy HH.** Writing skills. Chapter 8. International Handbook of Medical Education: A Guide for Students. Sage Publications Asian Specific PTE Ltd. First edition; 2012.
4. **Balkhy HH** and Zingg W. Hand Hygiene in Specific Patient Populations and Situations: Neonates and Pediatrics. In: Hand Hygiene: A Handbook for Medical Professionals. Published Online: 5 MAY 2017.
5. Zingg W and **Balkhy HH.** Emergency preparedness: highly communicable respiratory infections. Chapter 49. Mayhall's Hospital Epidemiology and Infection Prevention Fifth Edition, 2020.

Peer Reviewed Journals:

1. **Balkhy HH,** Sabella C, Goldfarb J. Parvovirus: a review. Bulletin on the Rheumatic Diseases 1998 May; 47(3): 4-9.
2. **Balkhy HH** and Heinzel FP. Endotoxin fails to induce IFN-gamma in endotoxin tolerant mice: deficiencies in both IL-12 heterodimer production and IL-12 responsiveness. J Immunol. 1999 March; 162: 3633-3638.
3. **Balkhy HH,** Schreiber J. Severe Lacrosse Meningoencephalitis with significant neurologic sequelae. Pediatr Infect Dis J. 2000 Jan; 19(1): 77-80.
4. Osoba OA, **Balkhy HH,** Memish Z, Khan MY, AL-Thagafi A, Al- Shareef B, Al-Mowallad A, Oni GA. Diagnostic value of Brucella ELISA IgG and IgM in bacteremic and non-bacteremic patients with brucellosis. J Chemother 2001. Apr; 13 Suppl 1:54-9.
5. **Balkhy HH.** Traveling with children: the pre-travel assessment. International Journal of Antimicrobial Agents. 2003; Feb;21(2):193-9.
6. **Balkhy HH,** Memish Z, Osoba A. Meningococcal carriage among local inhabitants during the pilgrimage 2000-2001. International Journal of Antimicrobial Agents. 2003; Feb;21(2):107-11.
7. **Balkhy HH,** Memish Z. Rift Valley Fever: An Uninvited Zoonosis to the Arabian Peninsula. International Journal of Antimicrobial Agents. 2003; Feb;21(2):153-7.
8. Almuneef M, Memish ZA, Al Shaalan M, Al Banyan E, Al-Alola S, **Balkhy HH.** Brucella Melitensis Bacteremia in Children: A Review of 62 cases. Journal of Chemotherapy. 2003; Feb;15(1):76-80.
9. **Balkhy HH,** Memish Z, Rich M. Antibiotic Susceptibility of Neisseria Gonorrhoea in Riyadh, Saudi Arabia. J Chemother. 2003 Feb;15(1):95-6.
10. **Balkhy HH,** Memish Z, Almuneef M. Effect of intensive surveillance on cesarean-section wound infection rate in a Saudi Arabian hospital. Am J Infect Control. 2003 Aug;31(5):288-90.
11. Tamimi W, Hajeer A, Qasem L, Alkhashan A, Alsohabani A, Bernvil S, **Balkhy HH,** Memish Z. Expansion of Saudi blood donor pool by better screening and vaccination practices. Clin Diagn Lab Immunol. 2003 Nov;10(6):1159-60.
12. Memish ZA, **Balkhy HH,** Shibl AM, Barrozo CP, Gray GC. Streptococcus pneumoniae in Saudi Arabia: antibiotic resistance and serotypes of recent clinical isolates. Int J Antimicrob Agents. 2004 Jan;23(1):32-8.
13. Memish ZA, **Balkhy HH.** Brucellosis and international travel. J Travel Med. 2004 Jan-Feb;11(1):49-55.
14. **Balkhy HH,** Memish ZA, Abed E, Qasem L, Amer AB, Masoud S, Hajeer AH. Saudi National Guard donor screening for human T cell lymphotropic virus I/II: time to use molecular biology techniques. Mil Med. 2004 March; 169(3):251-3.
15. **Balkhy HH,** Memish, Maha Almuneef A, Osoba A. Neisseria meningitidis W-135 carriage during the Hajj season 2003: Effect of changing the vaccination strategy on nasopharyngeal carriage. Scand J Infect Dis. 2004;36(4):264-8.

16. Almuneef MA, Memish ZA, **Balkhy HH**, Alotaibi B, Algoda S, Abbas M, Alsubaie S. Importance of screening household members of acute brucellosis cases in endemic areas. *Epidemiol Infect.* 2004 Jun;132(3):533-40.
17. **Balkhy HH**, Memish ZA, Muneef MA, Bafakeer S. Influenza a common viral infection among Hajj pilgrims: time for routine surveillance and vaccination. *J Travel Med.* 2004 Mar-Apr;11(2):82-6.
18. Almuneef MA, Memish ZA, Abbas MF, **Balkhy HH**. Screening healthcare workers for Varicella Zoster: can we trust the history? *Infect Control Hosp Epidemiol.* 2004 Jul;25(7):595-8.
19. Almuneef M, Memish ZA, **Balkhy HH**, Alalem H, Abutaleb A. Ventilator-associated pneumonia in a pediatric intensive care unit in Saudi Arabia: a 30-month prospective surveillance. *Infect Control Hosp Epidemiol.* 2004 Sep;25(9):753-8.
20. Memish ZA, **Balkhy HH**, Francis C, Cunningham G, Alhajeer A, Almuneef MA. Al-Khurma Hemorrhagic Fever: A case report of adequate infection control precision preventing disease transmission. *Br J Biomed Sci.* 2005;62(1):37-9.
21. Arabi Y, Memish ZA, **Balkhy HH**, Francis C, Ferayan A, Al Shimemeri A, Almuneef MA. Ventriculostomy-associated infections: incidence and risk factors. *Am J Infect Control.* 2005 Apr;33(3):137-43.
22. Alsubaie S, Almuneef M, Alshaalan M, **Balkhy HH**, Albanyan E, Alola S, Alotaibi B, Memish ZA. Acute brucellosis in Saudi families: Relationship between brucella serology and clinical symptoms. *Int J Infect Dis.* 2005 Jul;9(4):218-24.
23. **Balkhy HH**, Cunningham G, Francis C, Almuneef MA, Stevens G, Akkad N, Elgammal A, Alassiri A, Furukawa E, Chew FK, Sobh M, Daniel D, Poff G, Memish ZA. A National Guard outbreak of Burkholderia cepacia infection and colonization secondary to intrinsic contamination of albuterol nebulization solution. *Am J Infect Control.* 2005 Apr;33(3):182-8.
24. Almuneef M, Memish ZA, **Balkhy HH**, Alotaibi B, Helmy M. Chickenpox complications in Saudi Arabia: Is it time for routine varicella vaccination? *Int J Infect Dis.* 2005 Oct 27.
25. **Balkhy HH**, Memish ZA, Shibl A, Elbushier A and Osoba A. In Vitro activity of quinolones against *S. pneumoniae*, *H. influenzae* and *m. catarrhalis* in Saudi Arabia. *EMHJ.* 2005;11:36-4.
26. Almuneef MA, Memish ZA, **Balkhy HH**, Hijazi O, Cunningham G, Francis C. Rate, risk factors and outcomes of catheter-related bloodstream infection in a paediatric intensive care unit in Saudi Arabia. *J Hosp Infect.* 2006 Feb;62(2):207-13.
27. Almuneef MA, Memish ZA, **Balkhy HH**, Qahtani M, Alotaibi B, Hajeer A, Qasim L, Al Knawy B. Epidemiologic shift in the prevalence of Hepatitis A virus in Saudi Arabia: A case for routine Hepatitis A vaccination. *Vaccine.* 2006 May 11.
28. **Balkhy HH**, Cunningham G, Chew FK, Francis C, Al Nakhli DJ, Almuneef MA, Memish ZA. Hospital- and community-acquired infections: a point prevalence and risk factors survey in a tertiary care center in Saudi Arabia. *Int J Infect Dis.* 2006 Jul;10(4):326-33.
29. **Balkhy HH**, Al-Hajjar S. Avian influenza: are our feathers ruffled? *Ann Saudi Med.* 2006 May-Jun;26(3):175-82.
30. **Balkhy HH**, Memish ZA, Almuneef MA, Al-Haj-Hussein BT, Bukhari AI, Osoba A. Carriage of *Staphylococcus aureus* among Hajj pilgrims. *Saudi Med J.* 2006 Sep;27(9):1367-72.
31. Almuneef MA, Memish ZA, **Balkhy HH**, Otaibi B, Helmi M. Seroprevalence survey of varicella, measles, rubella, and hepatitis A and B viruses in a multinational healthcare workforce in Saudi Arabia. *Infect Control Hosp Epidemiol.* 2006 Nov;27(11):1178-83.
32. **Balkhy HH**, Memish ZA, Almuneef MA, Cunningham GC, Francis C, Fong KC, Nazeer ZB, Tannous E. Methicillin-resistant *Staphylococcus aureus*: a 5-year review of surveillance data in a tertiary care hospital in Saudi Arabia. *Infect Control Hosp Epidemiol.* 2007 Aug;28(8):976-82.
33. **Balkhy HH**. Avian Influenza: The tip of the iceberg. *Annals of Thoracic Medicine.* 2008 Oct-Dec;3(4):153-6.
34. Memish ZA, Stephens G, **Balkhy HH**, Cunningham G, Francis C, Poff G; and Saudi National Guard Infection Prevention and Control Group. Outbreak of *Burkholderia cepacia* bacteremia in immunocompetent children caused by contaminated nebulized sulbutamol in Saudi Arabia. *Am J Infect Control.* 2009 Jun;37(5):431-2.
35. **Balkhy HH**. The Inevitable! An emergence of a new influenza virus. *Annals of Thoracic Medicine.* 2009 Jul;4(3):109-10.
36. **Balkhy HH**, Abolfotouh MA, Al-Hathloul RH, Al-Jumah MA. Awareness, attitudes, and practices related to the swine influenza pandemic among the Saudi public. *BMC Infect Dis.* 2010 Feb 28;10:42.

37. **Balkhy HH**, Alsaif S, El-Saed A, Khawajah M, Dichinee R, Memish ZA. Neonatal rates and risk factors of device-associated bloodstream infection in a tertiary care center in Saudi Arabia. *Am J Infect Control*. 2010 Mar 38(2):159-61.
38. Al-Otaibi BM, El-Saed A, **Balkhy HH**. Influenza vaccination among healthcare workers at a tertiary care hospital in Saudi Arabia: facing challenges. *Ann Thorac Med*. 2010 Apr; 5(2):120-1.
39. Abou Elella R, Najm HK, **Balkhy HH**, Buliard L, Kabbani MS. Impact of bloodstream infection on the outcome of children undergoing cardiac surgery. *Pediatr Cardiol*. 2010 May; 31(4):489-9.
40. Al Johani SM, Akhter J, **Balkhy HH**, El-Saed A, Younan M, Memish Z. Prevalence of antimicrobial resistance among gram-negative isolates in an adult intensive care unit at a tertiary care center in Saudi Arabia. *Ann Saudi Med*. 2010 Sept-Oct; 30(5):364-9.
41. **Balkhy HH**, El-Saed A, Sallah M. Epidemiology of H1N1 (2009) Influenza vaccination among healthcare workers at a tertiary care center in Saudi Arabia: a 6- month surveillance study. *Infect Control Hosp Epidemiol*. 2010 Oct 31(10):1004-10.
42. El Saed A, Al-Otaibi B, **Balkhy HH**. Authors' reply. *Ann Thorac Med*. 2010 Oct; 5(4) 250-1.
43. **Balkhy HH**, El-Beltagy K, El-Saed A, Sallah M, Jagger J. Benchmarking of percutaneous injuries at a teaching tertiary care center in Saudi Arabia relative to United States hospitals participating in the Exposure Prevention Infection Network (EPINet). *Am J Infect Control*. 2011 Feb;1-6.
44. Ahmed GY, **Balkhy HH**, Bafaqeer S, Al-Jasir B, Althaqafi A. Acceptance and adverse effects of H1N1 vaccinations among a cohort of National Guard Health Care Workers during the 2009 Hajj season. *BMC Res Notes*. 2011 Mar 13;4:61.
45. Al-Jumah M, Abolfotouh MA, Alabdulkareem IB, **Balkhy HH**, Al-Jeraisy MI, Al-Swaid AF, Al-Musaaed EM, Al-Knawy B. Public attitude towards biomedical research at outpatient clinics of King Abdulaziz Medical City, Riyadh, Saudi Arabia. *East Mediterr Health J*. 2011 Jun;17(6):536-45.
46. El-Saed A, Sayyari A, Hejaili F, Sallah M, Dagunton N, **Balkhy H**. Higher access-associated bacteremia but less hospitalization among Saudi compared with US hemodialysis outpatients. *Semin Dial*. 2011 Jul-Aug;24(4):460-5.
47. **Balkhy HH**, El Beltagy KE, El-Saed A, Sallah M, Jagger J. Benchmarking of percutaneous injuries at a teaching tertiary care center in Saudi Arabia relative to United States hospitals participating in the Exposure Prevention Information Network. *Am J Infect Control*. 2011 Sep;39(7):560-5.
48. Tayeb HT, **Balkhy HH**, Aljohany SM, Elbanyan E, Alalola S, Alshaalan M. Increased prevalence of rotavirus among children associated gastroenteritis in Riyadh Saudi Arabia. *Virol J*. 2011 Dec 18;8(1):548.
49. **Balkhy HH**, El-Saed A, Al Johani SM, Francis C, Al-Qahtani AA, Al-Ahdal MN, Altayeb HT, Arabi Y, Alothman A, Sallah M The epidemiology of the first described carbapenem-resistant *Klebsiella pneumoniae* outbreak in a tertiary care hospital in Saudi Arabia: how far do we go? *Eur J Clin Microbiol Infect Dis*. 2012 Aug;31(8):1901-9.
50. Al-Dorzi HM, El-Saed A, Rishu AH, **Balkhy HH**, Memish ZA, Arabi YM. The results of a 6-year epidemiologic surveillance for ventilator-associated pneumonia at a tertiary care intensive care unit in Saudi Arabia. *Am J Infect Control*. 2012 Feb 6.
51. **Balkhy HH**, Bawazeer MS, Kattan RF, Tamim HM, Al Johani SM, Aldughashem FA, Alem HA, Adlan A, Herwaldt LA. Epidemiology of *Acinetobacter* spp associated healthcare infections and colonization among children at a tertiary care hospital in Saudi Arabia: A 6-year retrospective cohort study. *Eur J Clin Microbiol Infect Dis*. 2012 Oct;31(10):2645-51.
52. El Beltagy K, El-Saed A, Sallah M, **Balkhy HH**. Impact of infection control educational activities on rates and frequencies of percutaneous injuries (PIs) at a tertiary care hospital in Saudi Arabia. *J Infect Public Health*. 2012 Aug;5(4):297-303.
53. Aly M, **Balkhy HH**. The prevalence of antimicrobial resistance in clinical isolates from Gulf Corporation Council countries. *Antimicrob Resist Infect Control*. 2012 Jul 19;1(1):26.
54. **Balkhy H**. Paving the road for public health initiatives. *J Infect Public Health*. 2012 Oct;5(5):319-20.
55. Al-Thaqafi MS, **Balkhy HH**, Memish Z, Makhdom YM, Ibrahim A, Al-Amri A, Al-Thaqafi A. Improvement of the low knowledge, attitude and practice of hepatitis B virus infection among Saudi national guard personnel after educational intervention. *BMC Res Notes*. 2012 Oct 30;5:597.
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ABSTRACTS AND PRESENTATIONS
Available upon request

Standard form for the proposal of names of persons for nomination of the Regional Director of the Eastern Mediterranean Region of the World Health Organization.

Please provide details of the qualifications and characteristics of the person proposed by your government about the criteria contained in Decision no. 3 contained in document EM/RC59/13.

1) A strong technical and public health background and extensive experience in international health

Dr Balkhy is a clinician by training, a scientist and public health professional. She has proved herself as a public health leader at national, regional and international levels.

- She graduated from King Abdulaziz University in Jeddah, Saudi Arabia in 1991, and completed her training in Pediatrics at the Massachusetts General Hospital, Boston USA in 1996. She then became Pediatric Infectious Disease Fellow, at the Cleveland Clinic Foundation and Case Western Reserve University, including two years of basic science research in the immunology of sepsis. On return to Saudi Arabia, she entered the Ministry of National Guard Health Affairs, initially as a clinician and then, in 2009, she became the first female Executive Director for the Infection Prevention and Control Department (IPCD) at the Ministry. The Ministry is composed of five specialized hospitals and 38 family medicine centres and serves a population of over 1.3 million. Under Dr Balkhy's leadership, the programme had three main areas of focus: hospital epidemiology, public health, and occupational health.
- Dr Balkhy's clinical practice with direct patient care extended over 26 years. Alongside her clinical work, she developed her career as a research scientist and global public health expert in the fields of pediatrics, infectious disease, infection prevention and control (IPC), patient safety (PS) and antimicrobial resistance (AMR). She played an important leadership role advancing IPC nationally as well as through her engagement in training and education at national and regional level. Her education and diverse clinical, scientific and managerial experience has equipped her with the needed understanding of the complexities of disease transmission, the risks of emerging and reemerging infections, and the prevention and mitigation of such threats. She recognizes the impact of weak and poorly engineered healthcare systems in these areas as well as the impact of social determinants and access to health care on health outcomes.
- During her time in the IPCD programme, she led on many national, regional and global projects. Dr Balkhy is an acknowledged regional expert on all matters pertaining to IPC and has provided her expertise on many committees with the Eastern Mediterranean Region Office (EMRO) and the main World Health Organization (WHO) office. For over ten years she led the Gulf Cooperation Council (GCC) Center for Infection Control and the WHO Collaborating Centre for Infection Prevention and Control and Antimicrobial Resistance and has served in over 14 relevant committees with the WHO. Her national and regional public health leadership paved the way for her nomination by the Saudi Arabian government, and

her appointment by the WHO Director-General (DG), as the first Assistant Director-General (ADG) for Antimicrobial resistance (AMR).

2) Competency in organizational management

Dr Balkhy's variety of roles leading national, regional and international initiatives is a testament to her organizational and managerial competence. She has long term vision, strong communication skills, and understands what is needed to get the job done.

- Dr Balkhy developed a world class IPC program at her institution that served the region. During that time she led the production and the revisions for the National Guard IPC manual, which includes over 75 policies. This manual eventually served as the basis for the national Saudi IPC manual and the GCC IPC manual. She also led the development of the guidelines for Healthcare Associated Infections (HAI) surveillance manual along with the development of national and regional training workshops for the surveillance manual for over ten years. This work was coordinated by Dr Balkhy with key national and regional experts from each of the GCC countries to strengthen work on HAI surveillance in the region.
- In 2009, her vision was to fill a national and regional gap in research on infectious agents, notably in respect of AMR and emerging pathogens. She convened the necessary experts, mobilized funding, built a team with complementary research agendas, and ensured national capacity building. She provided the impetus for the creation of the Infectious Disease Research Department (IDRD) as a major branch of King Abdullah International Medical Research Centre (KAIMRC). Five years into her leadership of the IDRD, MERS CoV emerged as a national, regional, and global threat. She was able to repurpose areas of the work, including human and financial resources, to focus on MERS CoV, while at the same time managing the hospital outbreak. The revised agenda was to better understand the epidemiology, transmission, and pathogenicity of MERS CoV as it continued to spread and co-orchestrating international and national collaborations relevant to MERS CoV. Major outcomes included human clinical trials on therapeutics and human and animal vaccine studies. Later, the IDRD played a crucial role during the COVID-19 pandemic including conducting whole genome sequencing of the virus and collaborating on clinical trials for SARS CoV-2 treatment.
- At the international level, as ADG for AMR at the WHO since 2019, Dr Balkhy has demonstrated her ability to deploy her organizational skills on the international stage in establishing the new flagship programme on AMR. During the pandemic she became the WHO lead for the diagnostic pillar of the ACT-A consortium; and finally, she served as the interim ADG for Access to Medicines and Health Products, from December 2022 to May 2023, effectively leading on sensitive areas related to substandard and falsified medicines and access to medical counter measures.

3) Proven historical evidence for public health leadership

Dr Balkhy has shown evidence of her capacity for leadership at national, regional and international levels, and also the commitment to transfer learnings from one level to the other. She takes in her stride the challenges of public health leadership and is not afraid to take difficult decisions.

- An example was the emergence of MERS CoV in the Kingdom of Saudi Arabia. Dr Balkhy led the public health response at both hospital and community levels. She managed the development and updating of policy and the response plan as new evidence emerged, collaborated with relevant non-health sectors for a One Health response, and engaged with the community and media for awareness and education. Early and decisive decisions were needed to stop the outbreak. This required clear communication based on evolving community and health system dynamics, emerging science, and understanding of the health workforce resources and limitations. The control of this very challenging outbreak was effectively managed in a short time with no deaths of healthcare workers.
- As ADG for AMR, she has successfully established and staffed the new flagship programme on AMR involving complex partnerships with UN and other organizations. She has been able to establish the strategic priorities for AMR with the vision of a patient-centered and public health programmatic approach to antimicrobial resistance. She established a robust national action plan (NAP) support team, a diagnostics and surveillance unit and a robust Quadripartite¹ Joint Secretariat for AMR and the AMR Multi-partner Trust Fund (AMR-MPTF), both the later of which she led on the human sector aspects of the program. She also identified internal WHO working arrangements to strengthen collaboration with other areas relevant to AMR including IPC, Water Sanitation and Hygiene (WASH), immunization, and Primary Health Care (PHC).
- Under Dr Balkhy's leadership the future for tackling AMR in the post-pandemic era is well positioned. She has been instrumental in leading WHO communications to member states and in critical fora elaborating on the need to ensure explicit inclusions of AMR relevant interventions, for example, in the upcoming Health Emergency Preparedness and Response (HEPR) architecture, the pandemic treaty and pandemic fund, and even in already established funds such as the Global Fund (GF). During her leadership as the ADG for AMR a United Nations General Assembly (UNGA) High-Level Meeting (HLM) was convened in April 2021 and

¹ World Health Organization, World Organization for Animal Health, Food and Agriculture Organization and the United Nations Environment Programme.

a resolution for a further UNGA-HLM was decided for 2024. Dr Balkhy led the discussions for WHO for the third AMR ministerial conference in Oman in November 2022, that led to the **Muscat Manifesto** identifying targets on antimicrobial use in both the human and animal sectors. She will also inform and facilitate Member States' discussions leading up to the 2024 HLM and the the fourth AMR Ministerial Conference to be hosted by the Kingdom of Saudi Arabia in 2024.

4) Sensitivity to cultural, social, and political differences

Dr Balkhy has extensive experience of dealing with people from all over the globe and has demonstrated her ability to gain their trust and respect.

- She has very good communication skills and is able to manage sensitively cultural, social and political differences. She believes in inclusiveness to create collegial and professional working environments. She has been able to study, work, lead and collaborate throughout her life in multiple countries around the world engendering respect, collegiality, humbleness, and professionalism. Dr Balkhy is therefore mindful of such differences and is not afraid to speak up and act when insensitivities arise. She has been commended at different stages of her career for leading by example – an inspirational mentor, hardworking, and demonstrating strong ability to manage conflict.
- Dr Balkhy has great understanding of the implications of religion and culture in general and specifically for different communities in the EMRO region. She has learned firsthand from the challenges she has faced in managing critical public health agendas, such as Brucella, dengue, malaria, influenza, and MERS CoV, that engaging constructively with communities, and respecting their beliefs, is key to success in public health. She is an advocate for equitable access to care and ensuring that **No One is Left Behind**.
- In 2019, Dr Balkhy was the recipient of the **Princess Noura Women Leadership Award in Science** in its second term, 2019. She is a strong advocate for women's education and national and regional human capacity building as a strategy for technical growth and independence. She has created opportunities for her staff to pursue higher education while on the job as well as the training of regional nationals. While having a clear strategy for creating the training programmes, she has herself demonstrated strong mentorship skills to all levels of her staff at every post she has assumed. As a female leader, Dr Balkhy has a clear understanding of the implications of an unsafe work environment. She has and continues to offer full access to herself and her office for any needed consultation, counselling, or mentorship. It is a clear WHO charter to ensure staff safety and respect at the workplace and she stands ready to lead in this area and to be proactive in prevention of sexual exploitation and harassment.

5) A strong commitment to the work of WHO

Since 2005, Dr Balkhy has worked closely with WHO at all different levels and in a number of different capacities. Much of her collaborative work with WHO has already been touched on above. Her strong commitment to WHO's work, and her recognition of its unique importance in improving global health, is unquestionable.

- Her first collaboration was on patient safety when her hospital was one of seven global hospital sites to pilot the WHO protocol for the first patient safety goal on hand hygiene "Clean care is safer care". She has since then represented the region on many WHO regional and global committees, among them the International Health Regulations (IHR) commission for the Eastern Mediterranean Region, WHO's Strategic and Technical Advisory Group on Antimicrobial Resistance (STAG-AMR) from 2013 and the Ebola IHR review committee in 2015-16. As noted, she has for many years led the WHO Collaborating Centre for IPC and AMR from her division at the Ministry of National Guard. She acted as a consultant to WHO on matters related to IPC and emergencies on many occasions prior to joining WHO as ADG.
- Dr Balkhy is a firm believer in WHO's vision of Health for All. Her ambition as Regional Director would be to work with Member States in addressing their fragile health systems, establishing strong primary health care services and achieving Universal Health Coverage. And she believes WHO must help countries do all they can to get the health-related Sustainable Development goals back on track and be fully prepared for the next pandemic.

6) The good physical condition required of all staff members of the Organization

Dr Balkhy has an annual assessment conducted by WHO's Staff Health and Wellbeing Department. The last assessment was in April 2023 which confirmed that she was in good health.