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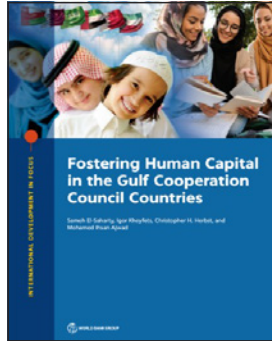
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HUMAN CAPITAL AND GENDER

FOSTERING HUMAN CAPITAL IN THE GULF COOPERATION COUNCIL COUNTRIES



The formation of human capital--the knowledge, skills, and health that people accumulate over their lifetimes--is critical for the six Gulf Cooperation Council (GCC) countries. To address the challenges, this report outlines four strategies in a "whole-of-government" approach: investing in high-quality early childhood development; preparing healthier, better educated, and skilled youth for the future; enabling greater adult labor force participation; creating an enabling environment for human capital formation. These strategies are based on best practices in other countries and feature some of the GCC countries' plans, including their national "Visions," to take their economies and societies further into the twenty-first century.

Published June 2020

<https://openknowledge.worldbank.org/handle/10986/33946?deliveryName=DM74141>

UNITED ARAB EMIRATES (UAE): LEGAL REFORMS TO STRENGTHEN WOMEN'S ECONOMIC INCLUSION - CASE STUDY



In 2019-2020, the United Arab Emirates (UAE) introduced a historic package of legal reforms aimed at strengthening women's economic participation, in line with its national policy commitment to gender balance. The reforms signified a major milestone for the region, introducing paid parental leave in the private sector for the first time in the Middle East and North Africa (MENA), enabling women to choose where to live and to travel outside the home and internationally in the same way as men, introducing the principle of equal pay for work of equal value, and lifting the obedience provision in the UAE's Personal Status Law. This case study explores the nature of the legal reforms in the UAE, their potential implications for women's economic empowerment and the UAE's gender policy goals, and the factors that provided the enabling conditions for change.

Published September 2022

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099419309142218876/idu073eb970d033eb04d4608fc80d158fa944973>

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GULF ECONOMIC UPDATES

A series of semiannual reports prepared by the MNA MTI Global practice. Each report provides an overall economic update for each GCC country and examines a select topic in depth.



FALL 2019

Gulf Economic Update: Economic Diversification for a Sustainable and Resilient GCC. This edition explores the links between economic diversification and environmental sustainability. The analysis highlights the need to integrate environmental sustainability and ecosystem resilience considerations into the decision-making process on the diversification paths and options in the GCC countries.

The In Focus section in this edition of the Gulf Economic Update identifies three important ways through which regional investment strategies could better align diversification with environmental sustainability and climate resilience.

<https://www.worldbank.org/en/country/gcc/publication/gulf-economic-monitor-december-2019>



SPRING 2021

Gulf Economic Update: COVID-19 Pandemic and the Road to Diversification. In this issue of the Gulf Economic Update, the focus is on fiscal revenues and structural reforms including strategic investments in digitalization and telecommunications. Strategic investment in advanced telecommunications technologies, including 5G, is underway in the GCC but beyond capital spending on infrastructure, the telecommunications sector would benefit greatly from improvements in the legal, regulatory, and competition frameworks under which service providers operate.

<https://www.worldbank.org/en/country/gcc/publication/gulf-economic-update-covid-19-pandemic-and-the-road-to-diversification>



FALL 2021

Gulf Economic Update: Seizing the Opportunity for a Sustainable Recovery. This issue's special section focused on the GCC wage bill as an important part of the existing social contract whereby GCC governments have provided free health care, education, social security benefits, and subsidized housing and utilities to their citizens. In addition, citizens have been quasi-guaranteed well-paid public sector jobs. This model worked well while oil prices were high and local populations limited. However, as oil prices slumped, populations grew rapidly, and the wage bill has become both an important contributor to fiscal deficits as well as a drag on potential growth of the private sector. The section highlights the need to rein in civil service growth and salary inflation to put the wage bill on a sustainable footing within a new economic model based on private sector growth and development.

<https://www.worldbank.org/en/country/gcc/publication/gulf-economic-update-seizing-the-opportunity-for-a-sustainable-recovery>



SPRING 2022

Gulf Economic Update: Achieving Climate Change Pledges. The special section of this issue discusses opportunities to restructure energy subsidies in the region, as well as opportunities that exist for the GCC countries to become renewable energy powerhouses by diversifying into green technologies. This transition to an environment-friendly model will be a recurrent theme in future issues of the Gulf Economic Update, making this the first in a series that will focus on green growth in the region.

<https://www.worldbank.org/en/country/gcc/publication/gulf-economic-update-achieving-climate-change-pledges>



FALL 2022

Gulf Economic Update: Green Growth Opportunities in the GCC. This issue of the Gulf Economic Update includes a special section focused on GCC green growth opportunities for the GCC countries as the world accelerates transition to a greener future. Moving away from fossil fuels towards greener energy should not be seen as a threat but as a tremendous opportunity. This direction is entirely in line with GCC country vision documents that outline an image of the economy of the future that relies increasingly on the private sector playing a leading role in investment, job creation and value addition. The report presents the latest economic developments in the GCC focusing on the post-pandemic recovery, the vaccine roll-out and the implications of a more favorable oil market. The team will highlight the medium-term prospects given continued volatility in the oil market and the need to diversify GCC economies.

<https://www.worldbank.org/en/country/gcc/publication/gulf-economic-update-october-2022>

FROM #HASHTAGS TO LEGISLATION: ENGAGEMENT AND SUPPORT FOR ECONOMIC REFORMS IN THE GULF COOPERATION COUNCIL COUNTRIES



Ownership of reforms by citizens is often presented as important for success. This paper explores media engagement and support for economic reforms in the Gulf Cooperation Council countries using text analysis techniques on publicly available sources. The results show that while reform efforts have intensified in recent years in the Gulf Cooperation Council countries, these efforts tend to focus on stronger rather than weaker policy areas, potentially limiting the growth-enhancing effect of reforms. Social media analysis using Twitter shows that the population's support for reforms has been declining. The analysis of traditional news media points to more engagement by international than by local media. However, sentiment from international media is less positive about economic reforms in the Gulf Cooperation Council countries. Sentiment in international media and social media matters, as evidenced by its positive and strong correlation with foreign direct investment inflows into the Gulf Cooperation Council countries.

Published June 2022

<https://openknowledge.worldbank.org/bitstream/handle/10986/37568/IDU0ab424d070347e0498f0b52208fdff6c39f1f.pdf?sequence=1&isAllowed=y>

KNOWLEDGE ECONOMY INDEX FOR THE PUBLIC SECTOR



The first of its kind, both globally and within the MENA region, the pilot study benchmarked 20 public sector organizations alongside each other, to provide a snapshot of their existing knowledge management practices and their relationship to Human Resources (HR), Information Technology (IT) systems, and Organizational Culture. The report is based on findings from a survey that was sent to over 2,200 public servants in 20 organizations. The findings also include information gathered from 24 participating agencies in the form of focus group discussions. It is hoped that this study is a first step towards sharing the good practices that already exist in the finance and oil sector to “bridge the knowledge” from Kuwait’s highest performing organizations to their counterparts in the public and private sectors.

Published January 2022

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099151003202317502/p16932706b77e40a0985b06e5de2b96878>

BEST PRACTICES IN THE OPERATION OF PARTIAL CREDIT GUARANTEE SCHEMES: GUIDE FOR POLICY MAKERS



As part of the technical cooperation program agreement with the Saudi government, the World Bank Group (WBG) team has been working with the management and staff of the Kafalah partial credit guarantee scheme (PCGS) to provide technical assistance to strengthen Kafalah's operations, introduce products innovations, and integrate global best practices. This policy note summarizes best practices on various topics of interest to Kafalah that the WBG provided during 2018-2020.

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<https://openknowledge.worldbank.org/handle/10986/35170>

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PROGRAM FOR SCHOOL EVALUATION AND ACCREDITATION IN SAUDI ARABIA

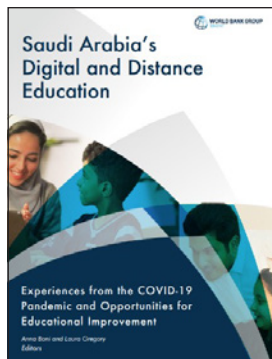


A report on ETEC’s program for school evaluation and accreditation in Saudi Arabia, developed between late 2021 and June 2022, presents a comprehensive review of Saudi Arabia’s plans and developments in school evaluation and accreditation. The report was developed in close collaboration between teams from the World Bank and ETEC’s Tamayoz center. In developing the report, various plans and documents related to Saudi Arabia’s new program for school evaluation and accreditation – e.g., organizational frameworks, procedural guides, standards, and tools – were reviewed. The World Bank team also met with small groups of stakeholders, including evaluation and accreditation specialists, school principals, and parents. A number of key findings and further recommendations are presented in the report, drawing on international evidence of good practices and lessons learned from other countries.

Published February 2023

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099152002232323793/p17551414058d23f1316c143f31ab4f1d1ba718169f6>

SAUDI ARABIA’S DIGITAL AND DISTANCE EDUCATION: EXPERIENCES FROM THE COVID-19 PANDEMIC AND OPPORTUNITIES FOR EDUCATIONAL IMPROVEMENT



Faced with the crisis of the Coronavirus disease 2019 (COVID-19) pandemic in March 2020, Saudi Arabia embarked on a journey to adapt the way in which schooling operated, enabling a continued education for children across the country. This report compiles the results of the study of Saudi experience and provides a comprehensive review of the experiences of digital and distance education in Saudi Arabia, along with an analysis of opportunities for future educational improvement. A variety of data gathering instruments were designed and implemented by the World Bank team. The data sources included focus groups; surveys of nationally representative groups of school principals, teachers, students, parents, and supervisors; virtual classroom observations;

Continued

and interviews with key personnel. Analyses of these data informed the conclusions and recommendations presented in this report.

Published February 2022

<https://www.worldbank.org/en/country/saudi-arabia/publication/saudi-arabia-s-digital-and-distance-education-experiences-from-the-covid-19-pandemic-and-opportunities-for-educational-i>

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STRENGTHENING THE PHARMACEUTICAL SYSTEM IN THE KINGDOM OF SAUDI ARABIA TOWARDS A MEDICINE POLICY TO SUPPORT VISION 2030

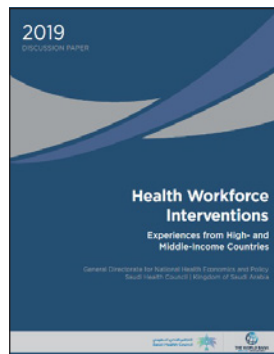


The National Transformation Program (NTP) aims, over time, to achieve better and more equitable health outcomes while reducing pressure on public finances. A new medicine policy is needed to support those aims by laying out the medium- and long-term strategies of KSA in relation to medicines, thus providing direction to public and private actors on both the demand and the supply side of the market. This discussion paper was produced by the Saudi Health Council, with a team of authors from the Saudi Food and Drug Authority, the Ministry of Health, and the World Bank. The document is an output of the Reimbursable Advisory Services (RAS) program between the World Bank and the Kingdom of Saudi Arabia (KSA). It presents the major issues that were discussed in the process of working towards the development of a new medicines policy in Saudi Arabia, examining current national practice in light of international practices and experiences.

Published June 2020

<https://openknowledge.worldbank.org/bitstream/handle/10986/35846/Strengthening-the-Pharmaceutical-System-in-the-Kingdom-of-Saudi-Arabia-Towards-a-Medicine-Policy-to-Support-Vision-2030.pdf?sequence=1&isAllowed=y>

HEALTH WORKFORCE INTERVENTIONS: EXPERIENCES FROM HIGH- AND MIDDLE-INCOME COUNTRIES: DISCUSSION PAPER

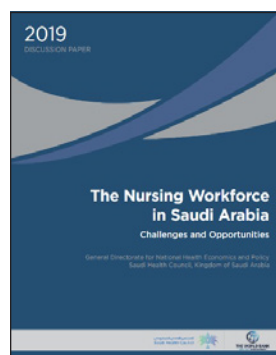


This evidence review examines the global published and gray literature on interventions designed to improve the availability, distribution and performance of health workers, focusing on physicians, nurses, and allied health professionals in high- and middle-income countries. The aim of this paper is to provide an overview of such policies, and to provide links to more detailed studies, rather than to provide a comprehensive and in-depth analysis of each.

Published June 2020

https://www.researchgate.net/publication/350041758_Health_Workforce_Interventions_Experiences_from_High-and_Middle-Income_Countries

THE NURSING WORKFORCE IN SAUDI ARABIA: CHALLENGES AND OPPORTUNITIES

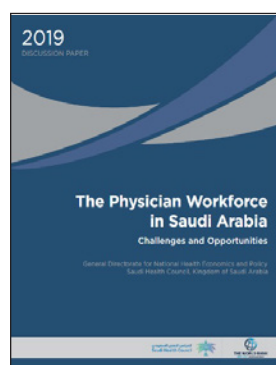


This paper summarizes the status of the nursing profession in Saudi Arabia, highlighting some of its key challenges and opportunities. The paper identifies and presents various options for nursing interventions and policies and is intended to be used as a resource for discussion and ideas on nursing reform. The paper was designed to elicit discussion and to serve as a background document for rigorous analytical work, and planning efforts, including the development of health workforce policies and strategies for Saudi Arabia.

Published June 2020

https://www.researchgate.net/publication/346970970_The_Nursing_Workforce_in_Saudi_Arabia_Challenges_and_Opportunities

THE PHYSICIAN WORKFORCE IN SAUDI ARABIA: CHALLENGES AND OPPORTUNITIES

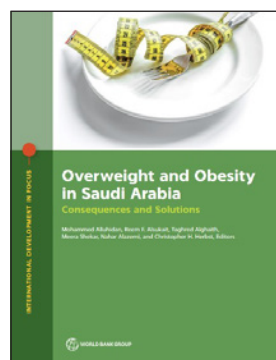


This paper summarizes the status of the medical profession in Saudi Arabia, highlighting some of its key challenges and opportunities. The paper identifies and presents various options for targeted interventions and policies related to the medical profession and is intended to be used as a resource for discussion and ideas on physician reform. It was designed to elicit discussion and to serve as a background document for rigorous analytical work and planning efforts, including the development of health workforce policies and strategies for Saudi Arabia.

Published September 2020

https://www.researchgate.net/publication/346971685_The_Physician_Workforce_in_Saudi_Arabia_Challenges_and_Opportunities

OVERWEIGHT AND OBESITY IN SAUDI ARABIA: CONSEQUENCES AND SOLUTIONS

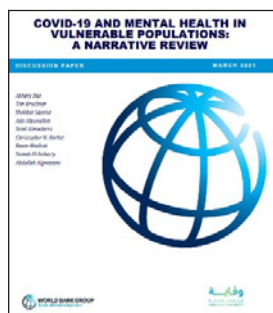


Overweight and obesity are both a disease and a biological risk factor linked to noncommunicable diseases. More than half of the adult population in Saudi Arabia is overweight, and one out of five is considered obese. These rates echo what is seen in other Gulf Cooperation Countries, representing an alarming regional challenge. Overweight and obesity have a large impact on the economy, through reduced productivity, increased disability, increased health-care costs, and reduced life expectancy. As Saudi Arabia undergoes massive economic transformation through Vision 2030, addressing this issue will contribute significantly to building its human capital, ensuring higher economic growth, and sustaining a workforce that is healthy and prepared for a productive future. While the causes of overweight and obesity are complex and numerous, several innovative and multisectoral evidence-based interventions are emerging globally as promising. Saudi Arabia has already embarked on the design and implementation of several such interventions and is committed to further expanding and scaling up such efforts in order to meet national goals and achieve results.

Published July 2022

<https://www.worldbank.org/en/country/saudi-arabia/publication/overweight-and-obesity-in-saudi-arabia>

COVID-19 AND MENTAL HEALTH IN VULNERABLE POPULATIONS: A NARRATIVE REVIEW

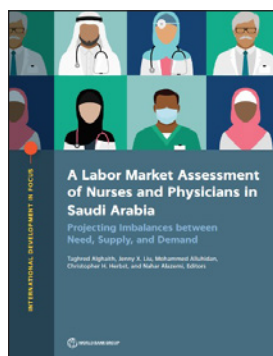


This paper examines the global implications of COVID-19 on mental health, with a focus on four particularly vulnerable populations: (1) unemployed adults; (2) youth; (3) older-age populations; and (4) healthcare workers. Considering the global public health burden of mental disorders, understanding COVID-19's psychological impact on vulnerable populations may provide policy makers with the information necessary to effectively direct resources. The paper focuses on these populations because racial, gender, and social class disparities endure in most educational and work opportunities.

Published March 2021

<https://openknowledge.worldbank.org/handle/10986/35847>

A LABOR MARKET ASSESSMENT OF NURSES AND PHYSICIANS IN SAUDI ARABIA: ADDRESSING FUTURE IMBALANCES BETWEEN NEED, SUPPLY, AND DEMAND

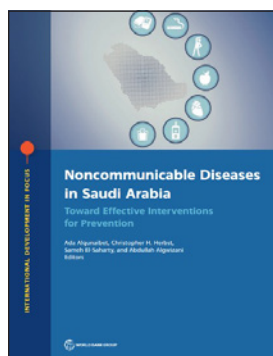


This book presents rigorous, empirical, and quantitative evidence to support national-level strategic planning efforts on human resources for health in Saudi Arabia. The book, a collaborative effort between the Saudi Health Council and the World Bank, is a first to anticipate and quantify projected future labor market imbalances of nurses and physicians in Saudi Arabia and to identify solutions to close those gaps. Drawing on the latest principles and modeling techniques in epidemiology and economics, the book forecasts future imbalances between epidemiological need and labor market supply and demand. It culminates in a set of policy recommendations to improve the availability, distribution, and performance of Saudi nurses and physicians. The book is expected to be of interest to health workforce planners and health systems researchers working in Saudi Arabia and beyond.

Published September 2021

<https://openknowledge.worldbank.org/handle/10986/36290>

NONCOMMUNICABLE DISEASES IN SAUDI ARABIA: TOWARD EFFECTIVE INTERVENTIONS FOR PREVENTION



To support strategic planning efforts, the book assesses the latest evidence on the NCDs prevalence and risk factors; explores the health and economic burden of NCDs, as well as their impact on human capital; and identifies key gaps in prevention efforts and ways to address these gaps. The book discusses the need for a national master plan for NCD prevention—one that is selective and targeted, with a particular focus on improving the implementation of cost-effective interventions and achieving results. The book will be of interest to all those who work on NCDs in Saudi Arabia and beyond.

Published November 2021

<https://openknowledge.worldbank.org/handle/10986/36546?locale-attribute=en>

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HUMAN RESOURCES FOR HEALTH INTERVENTIONS IN HIGH- AND MIDDLE-INCOME COUNTRIES: FINDINGS OF AN EVIDENCE REVIEW

This paper examines published and grey evidence on interventions to train, recruit, retain, distribute, and manage an effective health workforce, focusing on physicians, nurses, and allied health professionals in high- and middle-income countries.

Published by **Human Resources for Health**, June 2020

<https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-020-00484-w>

INDIVIDUALS WITH OBESITY AND COVID-19: A GLOBAL PERSPECTIVE ON THE EPIDEMIOLOGY AND BIOLOGICAL RELATIONSHIPS

After a systematic search of the Chinese and English language literature on COVID-19, 75 studies were used to conduct a series of meta-analyses on the relationship of individuals with obesity–COVID-19 over the full spectrum from risk to mortality. A systematic review of the mechanistic pathways for COVID-19 and individuals with obesity is presented in this article prepared jointly by the World Bank and Saudi Health Council experts.

Published by **Obesity Review**, August 2020

<https://onlinelibrary.wiley.com/doi/10.1111/obr.13128>

INDIVIDUALS WITH OBESITY AND COVID-19: A GLOBAL PERSPECTIVE ON THE EPIDEMIOLOGY AND BIOLOGICAL RELATIONSHIPS

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Published by **Obesity Reviews**, August 2020

<https://onlinelibrary.wiley.com/doi/10.1111/obr.13128>

CHALLENGES AND POLICY OPPORTUNITIES IN NURSING IN SAUDI ARABIA

This case study summarizes Saudi Ministry of Health (MOH) and Saudi Health Council's (SHCs) evaluation of the current challenges facing the nursing profession in the KSA. It proposes policy

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interventions to support the transformation of nursing into a profession that contributes to efficient, high-quality healthcare for every Saudi citizen. Key to the success of modernizing the Saudi workforce will be an improved pipeline of nurses that leads from middle and high school to nursing school; followed by a diverse career path that includes postgraduate education.

<https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-020-00535-2>

ENVIRONMENTAL RISK FACTORS AND HEALTH: AN UMBRELLA REVIEW OF META-ANALYSES

This study summarizes the epidemiological evidence on environmental risk factors from meta-analyses through an umbrella review conducted on meta-analyses of cohort, case-control, case-crossover, and time-series studies that evaluated the associations between environmental risk factors and health outcomes defined as incidence, prevalence, and mortality. The evidence presented by this review should help to design public health interventions and the implementation of health in all policies approach aiming to improve populational health.

Published by International Journal of Environmental Research and Public Health, January 2021

<https://www.mdpi.com/1660-4601/18/2/704>

THE CAPACITY OF PRIMARY HEALTH CARE FACILITIES IN SAUDI ARABIA: INFRASTRUCTURE, SERVICES, DRUG AVAILABILITY, AND HUMAN RESOURCES

The study uses a countrywide Facility Survey that collected data in 2018 from 2319 PHCCs, generating information on their characteristics, number of health workers, services provided, and capacity elements captured through the Service Availability and Drug Availability constructed indices. Descriptive analysis was performed by rural-urban classification. Ordinary Least Squares (OLS) regressions were used to understand correlates to health workers and equipment availability. Finally, a logistic regression was fitted for selected services. Regressions controlled for various measures to determine correlates with facilities' capacity.

Published by BMC Health Services Research, April 2021

<https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-021-06355-x>

A NEEDS-BASED METHODOLOGY TO PROJECT PHYSICIANS AND NURSES TO 2030: THE CASE OF THE KINGDOM OF SAUDI ARABIA

To help with the workforce planning, a joint Saudi Public Health Council and the World Bank team of authors developed a new needs-based methodology for workforce planning, taking into consideration the health needs of the KSA population, cost-effective treatment service delivery models, and worker productivity.

Published by Human Resources for Health, April 2021

<https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-021-00597-w>

AMBIENT PARTICULATE MATTER BURDEN OF DISEASE IN THE KINGDOM OF SAUDI ARABIA

Ambient particulate matter is the fifth health risk factor in Saudi Arabia, contributing 9% of total mortality. Over the past 27 years, estimated exposure levels of PM_{2.5} in Saudi Arabia have been above WHO's air quality guidelines. Although since 2011 mortality and DALY rates attributable to PM_{2.5} have decreased, air pollution concentrations continue to increase. National and local authorities in Saudi Arabia should consider policies to reduce industrial and traffic-related air pollution in combination with the strengthening of current investments and improvements in health care and prevention services.

Published by Environmental Research, June 2021

<https://www.sciencedirect.com/science/article/pii/S0013935121003303>

A NEEDS-BASED METHODOLOGY TO PROJECT PHYSICIANS AND NURSES TO 2030: THE CASE OF THE KINGDOM OF SAUDI ARABIA

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Published by Human Resources for Health, April 2021

<https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-021-00597-w>

COVID-19 AND NON-COMMUNICABLE DISEASES: EVIDENCE FROM A SYSTEMATIC LITERATURE REVIEW

The article has been jointly produced by the WB staff and Saudi Public Health Authority officials. The objective of this literature review is to systematize the available evidence on the link between non-communicable diseases and Covid-19.

Published by BMC Public Health, June 2021

<https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-021-11116-w>

THE IMPACT OF SEVEN MAJOR NONCOMMUNICABLE DISEASES ON DIRECT MEDICAL COSTS, ABSENTEEISM, AND PRESENTEEISM IN GULF COOPERATION COUNCIL COUNTRIES

The article's authors included WB staff and well as officials from Kuwait Secretariat General for Development Planning, Saudi Public Health Authority, Qatar Ministry of Public Health, King Faisal Specialist Hospital and Research Center in Riyadh, UAE Ministry of Health and Prevention, and Bahrain Supreme Council of Health. The article estimated the current burden of seven major noncommunicable diseases on direct medical costs, absenteeism, and presenteeism in the six countries in the Gulf Cooperation Council: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Published by Journal of Medical Economics, July 2021

<https://www.tandfonline.com/doi/full/10.1080/13696998.2021.1945242>

PROJECTING HEALTH LABOR MARKET DYNAMICS FOR A HEALTH SYSTEM IN TRANSITION: PLANNING FOR A RESILIENT HEALTH WORKFORCE IN SAUDI ARABIA

Building an effective and efficient health system requires proactive planning for the health workers who are essential to its functioning. The article projects health labor market supply and demand through 2030, evaluates potential shortages and surpluses, and analyses different policy scenarios.

Published by Globalization and Health, September 2021

<https://globalizationandhealth.biomedcentral.com/articles/10.1186/s12992-021-00747-8>

ESTIMATING THE EFFECT OF NON-PHARMACEUTICAL INTERVENTIONS TO MITIGATE COVID-19 SPREAD IN SAUDI ARABIA

The aim of this joint study conducted by the World Bank, Saudi Ministry of Health and Public Health Authority was to evaluate the effect of NPIs on the spread of the COVID-19 and test strategies to open schools and resume international travel.

Published by BMC Medicine, February 2022

<https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-022-02232-4>

THE ECONOMIC BURDEN OF OVERWEIGHT AND OBESITY IN SAUDI ARABIA

The objective of this study was to provide estimates of direct and indirect costs using the best available data from within the country. This limitation required us to use an epidemiological approach and to limit the analysis to costs resulting from six major NCDs. Using these diseases, the team of authors from the World Bank and Saudi Ministry of Health and other Saudi health organizations quantified (1) direct medical costs, including the cost of hospitalizations, outpatient visits, emergency department visits, general practitioner visits, and prescription drugs; and (2) indirect costs arising from absenteeism and presenteeism only.

Published by PLOS One, March 2022

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0264993>

INDIVIDUAL PERFORMANCE-BASED INCENTIVES FOR HEALTH CARE WORKERS IN ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT MEMBER COUNTRIES: A SYSTEMATIC LITERATURE REVIEW

This study reviews the current evidence on effectiveness of individual-level performance-based incentives for health care in Organisation for Economic Co-operation and Development countries, which are relatively well situated to implement, monitor and evaluate performance-based incentives programs. Joint study by the WB and Saudi Health Council delineates the conditions under which sanctions or rewards - in the context of gain-seeking, loss aversion, and increased social pressure to modify behaviors - may be more effective.

Published by Health Policy, June 2022

<https://pubmed.ncbi.nlm.nih.gov/35422364/>

IMPACT OF NONCOMMUNICABLE DISEASES ON DIRECT MEDICAL COSTS AND WORKER PRODUCTIVITY, SAUDI ARABIA

This joint study by the WB and Saudi Public Health Authority aimed to estimate the effect of NCDs on direct medical costs and workforce productivity in Saudi Arabia. The study found a substantial economic burden of NCDs, particularly on worker productivity.

Published by **East Mediterranean Health Journal**, April 2022

<https://pubmed.ncbi.nlm.nih.gov/35545911/#affiliation-4>

EFFECT OF NON-PHARMACEUTICAL INTERVENTIONS IN THE EARLY PHASE OF THE COVID-19 EPIDEMIC IN SAUDI ARABIA

Non-pharmaceutical interventions have been widely employed to control the COVID-19 pandemic. Their associated effect on SARS-CoV-2 transmission have however been unequally studied across regions. This study focused on the association between NPIs and SARS-CoV-2 transmission in the Kingdom of Saudi Arabia during the first pandemic wave between March and October 2020.

Published by **PLOS Global Public Health**, May 2022

<https://journals.plos.org/globalpublichealth/article?id=10.1371/journal.pgph.0000237>

EFFECTIVENESS OF USING E-GOVERNMENT PLATFORM “ABSHER” AS A TOOL FOR NONCOMMUNICABLE DISEASES SURVEY IN SAUDI ARABIA 2019-2020: A CROSS-SECTIONAL STUDY

This article assesses the potential of using an e-government platform (Saudi Absher) to administer web-based health surveys. All Absher users were invited to participate in a web-based survey to estimate the prevalence of noncommunicable diseases and their risk factors in Saudi Arabia. The study concluded that with improvements in the design, the use of e-government platforms can provide a useful and potentially low-cost data source for public health research.

Published by **Frontiers in Public Health**, September 2022

<https://pubmed.ncbi.nlm.nih.gov/36211643/#affiliation-1>

NATIONAL MEDICINES POLICY DEVELOPMENT, SAUDI ARABIA

The article describes important components of the national medicines policy in Saudi Arabia, which was developed within a broader transformation of the health system and the economy. The new policy formalizes existing best practices, shapes emerging policies and sets a direction for future development in four main areas.

Published by **Bulletin of World Health Organization**, August 2022

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9306383/>

EFFECTIVE OPTIONS FOR ADDRESSING AIR QUALITY– RELATED ENVIRONMENTAL PUBLIC HEALTH BURDENS IN SAUDI ARABIA

Air pollution poses major disease burdens globally and accounts for approximately 10% of deaths annually through its contribution to a variety of respiratory, cardiovascular, and other diseases. The burden of disease is particularly acute in Saudi Arabia, where a mix of anthropogenic and natural sources of air pollution threatens public health. Addressing these burdens requires careful study of the costs and effectiveness of available technologies and policies for reducing emissions (mitigation) and avoiding exposure (adaptation). To help evaluate these options, World Bank and Saudi Public Health Authority staff conducted a literature review of over 3,000 articles published since 2010 and identified a wide variety of effective mitigation and adaptation.

Published in *Heliyon*, September 2022

<https://doi.org/10.1016/j.heliyon.2022.e10335>

MAKING USE OF AN APP (TAWAKKALNA) TO TRACK AND REDUCE COVID TRANSMISSION IN KSA

At the beginning of 2021, the KSA Government introduced a mandatory immunity passport to regulate access to public venues. The passport was part of the strategy of resuming public activities before reaching high vaccination coverage. The passport was implemented as a new service in the Tawakkalna mobile phone application (App). This study aimed to evaluate the effectiveness of the immunity passport, implemented through the Tawakkalna App, on SARS-CoV-2 spread.

Published by *medRxiv*, October 2022

<https://doi.org/10.1101/2022.10.16.22281142>

RESPONSIVENESS OF THE HEALTHCARE SYSTEM IN THE KINGDOM OF SAUDI ARABIA: EVIDENCE FROM A NATIONALLY REPRESENTATIVE SURVEY

This article presents data from the Saudi Health Systems Responsiveness survey – a nationally representative survey of 10,000 households interviewed in 2017. Using this dataset, WB and Saudi Health Council staff descriptively analyzed the level of responsiveness of inpatient and outpatient services (using the standard World Health Organization (WHO) responsiveness dimensions). Based on a logit modelling approach, the relationship between responsiveness and its key determinants was analyzed in terms of healthcare demand and supply.

Published by *BMC Health Services Research*, December 2022

<https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-022-08779-5>

A SCOPING REVIEW ON THE IMPACT OF THE COVID-19 PANDEMIC ON PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOR IN SAUDI ARABIA

A review of the literature on physical activity and sedentary behavior in Saudi Arabia associated with the timing of the lockdown allowed the authors to conclude that in the short term, physical activity decreased and sedentary behavior increased in conjunction with the movement restrictions. It would be important to continue tracking behaviors post-lockdown and identify subpopulations that may not have returned to their physical activity of pre-pandemic levels to focus on intervention efforts.

Published by *BMC Public Health*, March 2023

<https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-023-15422-3>

PUBLIC POLICIES TO INCREASE PHYSICAL ACTIVITY AND REDUCE SEDENTARY BEHAVIOR: A NARRATIVE SYNTHESIS OF “REVIEWS OF REVIEWS”

The purpose of this article is to present the results of a narrative synthesis to identify public policies that may be effective in increasing physical activity and/or reducing sedentary behavior. A novel strategy – narrative synthesis of ‘reviews of reviews’ – has been employed by authors to synthesize large amount of information published on the subject since January 1, 2000.

Published by Global Health Action, April 2023

<https://www.tandfonline.com/doi/full/10.1080/16549716.2023.2194715>

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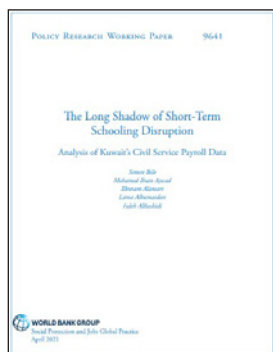
HEALTH, NUTRITION
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**SOCIAL
PROTECTION
AND JOBS**

SUSTAINABLE
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SOCIAL PROTECTION AND JOBS

THE LONG SHADOW OF SHORT-TERM SCHOOLING DISRUPTION ANALYSIS OF KUWAIT'S CIVIL SERVICE PAYROLL DATA



This report published in the Policy Research Working Paper series estimates the long-term impacts of schooling disruptions on private returns to schooling in Kuwait. It applies an instrumental variables approach to estimate the private returns to schooling, using unique civil service payroll data, with Kuwaiti students' exposure to the Gulf War (1990–91) as the instrument. The Gulf War is a suitable instrument because it profoundly affected Kuwaiti students' schooling at the time and is unlikely to be correlated with many potentially problematic omitted variables, such as students' ability. The analysis finds that (i) people who were of schooling age during the Gulf War tend to have lower educational attainment than people who were of schooling age after the Gulf War; (ii) men who were of schooling age at the time of the Gulf War earn on average 5.6 percent less for each year of schooling lost, and women earn correspondingly 6.8 percent less for each year of schooling lost; (iii) students who were in lower grades during the Gulf War tend to suffer a greater percentage wage loss for each year of lost schooling.

Published April 2021

<https://openknowledge.worldbank.org/bitstream/handle/10986/35517/The-Long-Shadow-of-Short-Term-Schooling-Disruption-Analysis-of-Kuwait's-Civil-Service-Payroll-Data.pdf?sequence=1>

TRACING LABOR MARKET OUTCOMES OF TECHNICAL AND VOCATIONAL TRAINING GRADUATES IN SAUDI ARABIA: A STUDY ON GRADUATES FROM THE TECHNICAL AND VOCATIONAL TRAINING CORPORATION (TVTC)



This paper exploits a rich dataset from various administrative sources to study short- and medium-term labor market outcomes of vocational education and training graduates in Saudi Arabia. It examines five cohorts of graduates from institutes operated by the Technical and Vocational Training Corporation who are formally employed in the private sector. The outcome measures for the study are based on monthly earnings data from the private sector social insurance records covering up to five years after graduation for the first cohort. The analysis finds positive returns to technical and

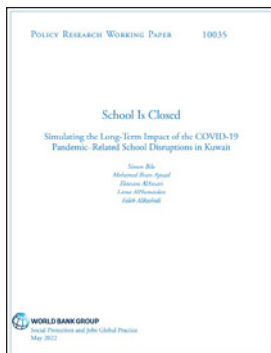
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vocational education are sustained over time. The analysis identifies several challenges and opportunities to further improve outcomes of graduates.

Published January 2022

<https://openknowledge.worldbank.org/server/api/core/bitstreams/3b46d6ab-df06-5099-8cae-3acf89929c2a/content>

SCHOOL IS CLOSED: SIMULATING THE LONG-TERM IMPACT OF THE COVID-19 PANDEMIC-RELATED SCHOOL DISRUPTIONS IN KUWAIT



The schooling disruption caused by COVID-19 in Kuwait is among the longest in the world. Using the similarities between the schooling disruptions due to the Gulf War and the schooling disruption due to the COVID-19 pandemic, this Policy Research Working Paper shows that students in school during the COVID-19 pandemic face significant reductions in the present value of their lifetime income. Furthermore, the findings show that students in higher grades during the pandemic are likely to face larger reductions in lifetime earnings than students in lower grades.

Published May 2022

<https://openknowledge.worldbank.org/bitstream/handle/10986/37411/IDU0e7f7494c051340403109d2300111bd4dbbc2.pdf?sequence=1&isAllowed=y>

TOWARDS A NATIONAL JOBS STRATEGY IN KUWAIT



This report is one of the main deliverables outlined in the legal arrangement of September 10, 2019, between the General Secretariat of the Supreme Council for Planning and Development (GS-SCPD) in Kuwait and the World Bank. The government has asked The World Bank for assistance to formulate a National Jobs Strategy to help confront these challenges, based on evidence and best practices. Reforms are recommended in four areas, or pillars: (i) make the public sector more sustainable, (ii) improve human capital, (iii) support private sector growth, and (iv) build a social protection system. In addition, the jobs strategy covers two cross-cutting themes: behavioral economics, and monitoring and evaluation, also embedded in the four pillars. A separate overview report is also available.

Published October 2022

<https://openknowledge.worldbank.org/handle/10986/38120>

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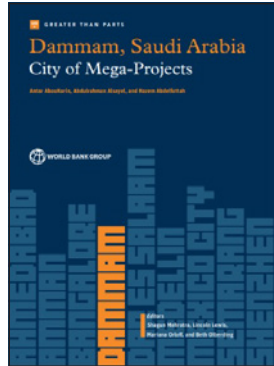
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METROPOLITAN DAMMAM: CITY OF MEGA-PROJECTS

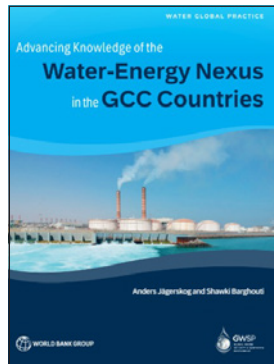


The main objective of this report is to understand how a variety of developing and emerging economies are successfully utilizing horizontal integration—across multiple infrastructure sectors and systems—at the metropolitan scale to deliver greater sustainability. This report explores how integrated planning processes extending well beyond city boundaries have been financed and implemented in a diverse group of metropolitan areas. From this analysis, the report derives models, poses guiding questions, and presents three key principles to provoke and inspire action by cities around the world.

<https://openknowledge.worldbank.org/handle/10986/34824>

Published November 2020

ADVANCING KNOWLEDGE OF THE WATER-ENERGY NEXUS IN THE GCC COUNTRIES



Countries in the Gulf Cooperation Council (GCC) region are facing many challenges due to climate change's effects on already-scarce water supplies. Energy resources and the energy sector are heavily tied to the water sector as desalination and other provision capacities are fueled by oil. This report focuses on these challenges and what opportunities there are for GCC countries to better manage their water and energy sectors. The report highlights potential pathways for improvement, such as addressing subsidies and pricing to discourage waste, increasing re-use of treated wastewater, and scaling up renewable energy use. Building on innovations already underway in the region, the report showcases a real opportunity to make changes in the sector for more efficient use of water and energy, which in turn promises to have positive effects on climate, jobs, and fiscal sustainability.

Published November 2022

<https://www.worldbank.org/en/country/gcc/publication/advancing-knowledge-of-the-water-energy-nexus-in-the-gcc-countries>

