

Summary of the Studies Reviewed For Analysis along the Key Elements of Agroecosystems Affected by COVID-19 Pandemic

a) Wildlife system/activity

1. COVID-19 lockdown allows researchers to quantify the effects of human activity on wildlife

By: Christian Rutz, Matthias-Claudio Loretto, Amanda E Bates, Sarah C Davidson, Carlos M Duarte, Walter Jetz, Mark Johnson, Akiko Kato, Roland Kays, Thomas Mueller, Richard B Primack, Yan Ropert-Coudert, Marlee A Tucker, Martin Wikelski, Francesca Cagnacci

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Minimizing human movement is crucial in establishing how well the available space can be shared with animals

Quoted statement: Reduced human mobility during the pandemic will reveal critical aspects of our impact on animals, providing important guidance on how best to share space on this crowded planet.

2. Conserving Africa's wildlife and wildlands through the COVID-19 crisis and beyond

By: Peter Lindsey, James Allan, Peadar Brehony, Amy Dickman, Ashley Robson, Colleen Begg, Hasita Bhammar, Lisa Blanken, Thomas Breuer, Michael Flyman, Nicia Giva, Dickson Kaelo, Simon Nampindo, Nyambe Nyambe, Kurt Steiner, Andrew Parker, Dilys Roe, Paul Thomson, Morgan Trimble, Alexandre Caron and Peter Tyrrell

Countries of focus: Africa

Type of analysis: Review

Impact type: Negative

Impact pathways: Restricting movement has reduced funding for wildlife and habitats conservation, posing a great human threat to nature

Quoted statement: Governments have responded by restricting human movement, which has reduced economic activity. These changes may benefit biodiversity conservation in some ways, but in Africa, we contend that the net conservation impacts of COVID-19 will be strongly negative.

3. Changes of China's regulatory regime on commercial artificial breeding of terrestrial wildlife in time of COVID-19 outbreak and impacts on the future

By: Mingqing You

Countries of focus: China

Type of analysis: Review

Impact type: Positive

Impact pathways: China has set out policies to completely prohibit consumption of terrestrial wildlife to protect its wildlife. Though an expensive undertaking, the government is committed to bear the loss for the sake of its wildlife protection.

Quoted statement: China's willingness to bear this big loss and financial burden indicates China's determination to protect public health and promote wildlife conservation.

4. The good, the bad and the ugly of COVID-19 lockdown effects on wildlife conservation: Insights from the first European locked down country

By: Manenti, Raoul; Mori, Emiliano; Di Canio, Viola; Mercurio, Silvia; Picone, Marco; Caffi, Mario; Brambilla, Mattia; Ficetola, Gentile Francesco; Rubolini, Diego

Countries of focus: Italy

Type of analysis: Mixed (Review, Field data, insights)

Impact type: Both

Impact pathways: reduction of human disturbance allowed wildlife to exploit new habitats and increase daily activity; **however**, low human intrusion was beneficial for invasive alien species.

Quoted statement: some benefits include increase in species richness in temporarily less-disturbed habitats, a higher breeding success of an aerial insectivorous bird, and reduction of road-killing of both amphibians and reptiles

5. Illicit Wildlife Trade, Wet Markets, and COVID-19: Preventing Future Pandemics

By: Aguirre, A. Alonso; Catherina, Richard; Frye, Hailey; Shelley, Louise

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: banning of exotic animals such as bats can prevent future spread of novel viruses

Quoted statement: Live animal markets create the perfect conditions for novel viruses such as COVID-19 to emerge; thus to prevent future pandemics, the sale of exotic animals be banned at wet markets.

6. Food safety issues related to wildlife have not been taken seriously from SARS to COVID-19

By: Wei, Guangyue

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: food safety and wildlife issues remain largely unstudied

Quoted statement: After SARS, the whole world did not pay enough attention to food safety related to wildlife

7. The Story behind COVID-19: Animal Diseases at the Crossroads of Wildlife, Livestock and Human Health

By: De Sadeleer, Nicolas; Godfroid, Jacques

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: most human diseases are emerging from domesticated animals

Quoted statement: Domesticated animals and wild fauna thus constitute a reservoir for almost 80% of emerging human diseases

8. Beyond banning wildlife trade: COVID-19, conservation and development

By: Roe, Dilys; Dickman, Amy; Kock, Richard; Milner-Gulland, E. J.; Rihoy, Elizabeth; Sas-Rolfes, Michael

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: covid response needs to go beyond banning wildlife trade to include addressing habitat destruction and industrialized livestock production

Quoted statement: Indiscriminate wildlife trade bans risk doing more harm than good, both from a conservation and development perspective.

9. Attitudes towards Wildlife Consumption inside and outside Hubei Province, China, in Relation to the SARS and COVID-19 Outbreaks

By: Liu, Shuchang; Ma, Zheng Feei; Zhang, Yutong; Zhang, Yingfei

Countries of focus: Hubei Province, China

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: wildlife consumption has reduced significantly due to COVID-19

Quoted statement: Our study results indicate over the period between the SARS epidemic to the outbreak of the COVID-19 pandemic, attitudes towards the consumption of wildlife in China have changed significantly.

10. COVID-19 Therapies in Brazil: Should We Be Concerned with the Impacts on Aquatic Wildlife?

By: Farias, Davi Felipe; Souza, Terezinha; Souza, Juliana Alves Costa Ribeiro; Vieira, Leonardo Rogerio; Muniz, Marta Silva; Martins, Rafael Xavier; Goncalves, Iris Flavia Sousa; Pereira, Eduardo Afonso Silva; Maia, Maria Eduarda Souza; Silva, Marilia Guia Flor

Countries of focus: Brazil

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: use of unproven COVID-19 drugs is on the rise in Brazil posing major challenge to the aquatic life in Brazil

Quoted statement: The large-scale use of unproven drugs in response to the pandemic may add undue weight to the increased volume of pharmaceuticals entering the environment, leaving the local biota vulnerable to the harmful effects of these contaminants.

11. COVID-19, other zoonotic diseases and wildlife conservation

By: Santana, Carlos

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Increased contacts between wildlife and human likely to increase future pandemics

Quoted statement: Many experts have warned that environmental degradation is increasing the likelihood of future pandemics like COVID-19, as habitat loss and poaching increase close contact between wildlife and people.

12. Coronavirus disease 2019 (COVID-19) in domestic animals and wildlife: advances and prospects in the development of animal models for vaccine and therapeutic research

By: Sharun, Khan; Tiwari, Ruchi; Patel, Shailesh Kumar; Karthik, Kumaragurubaran; Iqbal Yatoo, Mohd; Malik, Yashpal S.; Singh, Karam Pal; Panwar, Parmod Kumar; Harapan, Harapan; Singh, Raj Kumar; Dhama, Kuldeep

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Knowing the hosts of COVID-19 can aid in developing its vaccines

Quoted statement: Identifying the potential host range of SARS-CoV-2 will not only help prevent the possibility of human-to-animal and animal-to-human transmission but also assist in identifying efficient animal models that can mimic the clinical symptoms, transmission potential, and pathogenesis of the disease. Such an efficient animal model will accelerate the process of development and evaluation of vaccines, immunotherapeutics, and other remedies for SARS-CoV-2

13. Natural remedies for Covid-19 as a driver of the illegal wildlife trade

By: Svolkinas, Linas; Goodman, Simon J.; Holmes, George; Ermolin, Ilya; Suvorkov, Pavel

Countries of focus: China

Type of analysis: Review

Impact type: Negative

Impact pathways: wildlife trade especially in China is linked to the origin and spread of COVID-19

Quoted statement: The wildlife trade is hypothesized to have played a role in the origins of the current pandemic, resulting incalls for restrictions on the legal wildlife trade, and greater enforcement against the illegal wildlife trade, on public health grounds.

14. Massive use of disinfectants against COVID-19 poses potential risks to urban wildlife

By: Nabi, Ghulam; Wang, Yang; Hao, Yujiang; Khan, Suliman; Wu, Yuefeng; Li, Dongmin

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Overuse of disinfectants to contain COVID-19 is likely to cause environment and wildlife harms

Quoted statement: Applying massive disinfectants pose a significant threat to urban environment and wildlife

15. The Consequences of COVID-19 and Other Disasters for Wildlife and Biodiversity

By: Rondeau, Daniel; Perry, Brianna; Grimard, Franque

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Corona pandemic has affected income generation in the studied countries

Quoted statement: The most salient feature of the pandemic is its creation of multiple income shocks to rural and coastal households in biodiverse countries, correlated across sectors of activities and spatially

16. What can we learn from wildlife sightings during the COVID-19 global shutdown?

By: Zellmer, Amanda J.; Wood, Eric M.; Surasinghe, Thilina; Putman, Breanna J.; Pauly, Gregory B.; Magle, Seth B.; Lewis, Jesse S.; Kay, Cria A. M.; Fidino, Mason

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: shut down of several cities in the world has increased global urban wildlife sighting

Quoted statement: While it is possible that wildlife claimed deserted streets and parks during the shutdown, the reported spike in sightings could simply be due to an increase in observations of wildlife that were always there

17. Linking Human Destruction of Nature to COVID-19 Increases Support for Wildlife

Conservation Policies

By: Shreedhar, Ganga; Mourato, Susana

Countries of focus: United Kingdom

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: community involvement in policy development can reduce extinction of wildlife

Quoted statement: Public support is key to craft a durable and legitimate long-term policy response to COVID-19, which concurrently addresses anthropogenic mass wildlife extinction.

b) Livelihoods

18. COVID 19 in INDIA: Strategies to combat from combination threat of life and livelihood

By: Krishnakumar, Balaji; Rana, Sravendra

Countries of focus: India

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Loss of livelihood, loss of lives

Quoted statement: The livelihood of the poor is facing more threat compared to their health

19. Food system disruption: initial livelihood and dietary effects of COVID-19 on vegetable producers in India

By: Harris, Jody; Depenbusch, Lutz; Pal, Arshad Ahmad; Nair, Ramakrishnan Madhavan; Ramasamy, Srinivasan

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Reduced sales of vegetables, lack of transport and disruptions in diet.

Quoted statement: Farming households in general, find it hard to mitigate these shocks in short term, accepting lower prices to maintain sales, but still with interruptions to the flow of vegetables to consumers thereby affecting diets more broadly in the country.

20. Distancing Bonus Or Downscaling Loss? The Changing Livelihood of Us Online Workers in Times of COVID-19

By: Stephany, Fabian; Dunn, Michael; Sawyer, Steven; Lehdonvirta, Vili

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Lack of health insurance because online platforms are not permanent source of employment, Increased levels of competition

Quoted statement: Downscaling loss effect may be dominating over the distancing bonus effect. Freelancers earning an income through online platforms are more likely to see a tighter market and larger variations in their income due to the increasing numbers of workers seeking income from online platforms due to high rates of unemployment.

21. Will COVID-19 be one shock too many for smallholder coffee livelihoods?

By: Guido, Zack; Knudson, Chris; Rhiney, Kevon

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Decline in coffee income, Reduced investments in the coffee sector

Quoted statement: Besides COVID-19, the intractability of coffee's vulnerability arises from its many intertwined crises produced by recurrent shocks and structural inequalities. COVID-19's global shock will likely exacerbate the vulnerability of small-scale growers, forcing many into alternative livelihoods.

22. Life or Livelihood? Mental Health Concerns for Quarantine Hotel Workers During the COVID-19 Pandemic

By: Teng, Yi-Man; Wu, Kun-Shan; Lin, Kuan-Ling

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Increased workload, Psychological stress associated with Job insecurity, Risk of exposure

Quoted statement: The hospitality industry and those who make a living within it will face unprecedented changes. The resulting economic stress, isolation, and uncertainty can quickly take a toll on their physical and mental health. When a hotel transforms into the quarantine hotel, employees must decide whether to continue to earn a living while risking their lives or to walk away.

23. COVID-19, Boko Haram and the Pursuit of Survival: A Battle of Lives against Livelihoods

By: Agbiboa, Daniel E.

Countries of focus: Nigeria

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Mass relocations and overcrowding which increases the rates of infection, food scarcity, unreliable power supply and emergency roadblocks which hinders food supply

Quoted statement: In the wake of the pandemic, non-essential movements may have lulled under a nationwide lockdown but not the insurgent violence of Boko Haram. It has killed more than 36000 people and displaced at least two million people. The main dilemma is now how an unsettled population will come to be settled within regions that remain fundamentally unsettled

24. Resilient agri-food systems for nutrition amidst COVID-19: evidence and lessons from food-based approaches to overcome micronutrient deficiency and rebuild livelihoods after crises

By: Heck, Simon; Campos, Hugo; Barker, Ian; Okello, Julius J.; Baral, Arun; Boy, Erick; Brown, Lynn; Birol, Ekin

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Loss of market and employment, restricted movements of goods and services

Quoted statement: COVID-19 has affected the 'software' of food systems through disrupted connections between supply and demand, even with seemingly well-established supply chains.

c) Social capital

25. Social Capital and Sleep Quality in Individuals Who Self-Isolated for 14 Days During the Coronavirus Disease 2019 (COVID-19) Outbreak in January 2020 in China

By: Xiao, Han; Zhang, Yan; Kong, Desheng; Li, Shiyue; Yang, Ningxi

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Sleep quality, lack of peer support, narrow social network

Quoted statement: Anxiety and stress of isolated individuals were at high levels, while the sleep quality was low which indicates that psychological health should be considered for individuals who isolate during epidemics and reduced social capital affects mental health and sleep.

26. Post COVID-19 ecological and social reset: moving away from capitalist growth models towards tourism as Buen Vivir

By: Everingham, Phoebe; Chassagne, Natasha

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Using the principles of degrowth through Buen vivir

Quoted statement: In a post-COVID-19 degrowth society, tourism as an alternative economic practice, that is guided by the principles of buen vivir can help support a continual but intentional degrowth of the socially and environmentally damaging sectors of the economy that are damaging to the wellbeing of local communities.

27. Social Capital in the Response to COVID-19

By: Pitas, Nicholas; Ehmer, Colin

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Physical distancing and isolation

Quoted statement: The necessary protective practices instituted in response to COVID-19 further undermines social capital, specifically extensive and prolonged physical distancing may accelerate the decline. Bridging and linking relationships already on the decline will be a subject to further strain.

28. The Emergence of a COVID-19 Related Social Capital: The Case of China

By: Bian, Yanjie; Miao, Xiaolei; Lu, Xiaolin; Ma, Xulei; Guo, Xiaoxian

Countries of focus: China

Type of analysis: Review

Impact type: Both

Impact pathways: Physical isolation, community lockdowns, social distancing, preventive habitus

Quoted statement: This context-specific version of social capital varies across individuals and social groups by education, occupation, and income, the three common stratification variables. Physical isolation component of the concept is more than likely a negative factor, bringing noises to positive coping, increasing negative coping, and lowering subjective wellbeing. However, intimate relations and informational diversity, the two social components of the concept, produce highly consistent and positive results, increasing all measured behavioral responses and quality life indicators.

29. Social Capital and Mental Health among Older Adults Living in Urban China in the Context of COVID-19 Pandemic

By: Sun, Qian; Lu, Nan

Countries of focus: China

Type of analysis: Review

Impact type: Both

Impact pathways: Provision of support to vulnerable groups, enhancing community organizations, fostering trust and reciprocity

Quoted statement: Cognitive social capital has a full mediation effect on the association between structural social capital and mental health indicators. It plays an important role in sustaining and improving mental health.

30. Influence of the Youth's Psychological Capital on Social Anxiety during the COVID-19 Pandemic Outbreak: The Mediating Role of Coping Style

By: Li, Dongmei

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Social anxiety levels, coping styles

Quoted statement: The sudden decrease of social activities due to the pandemic can easily trigger social anxiety, especially for youths. their social anxiety and coping style are at medium levels while their psychological capital is at medium and upper level during the pandemic. psychological capital is negatively correlated with social anxiety, while social anxiety is negatively correlated with positive coping. Psychological capital is negatively correlate with negative coping and positively correlated with positive coping.

31. Fighting COVID-19: social capital and community mobilisation in Hong Kong

By: Lau, Pui Yan Flora

Countries of focus: Hong Kong

Type of analysis: Review

Impact type: Both

Impact pathways: Strong community mobilization, delivery of face masks and advocating for hygiene measures

Quoted statement: Whilst the experience of fighting SARS as early as 2003 equipped Hong Kong people with adequate knowledge of virus prevention, efforts to control COVID-19 also benefited from social capital developed during the prolonged social protest since 2019. It has led to the emergence of bonding and bridging of social capital in local society based on similarity in political orientation.

32. The trouble with trust: Time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries

By: Elgar, Frank J.; Stefaniak, Anna; Wohl, Michael J. A

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Income inequality, Trust and group affiliations, civic engagements and confidence in state institutions

Quoted statement: The results indicate that societies that are more economically unequal and lack capacity in some dimensions of social capital experienced more COVID-19 deaths. Social trust and belonging to groups were associated with more deaths, possibly due to behavioural contagion and incongruence with physical distancing policy.

33. A commentary on The trouble with trust: Time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries

By: Lindstrom, Martin

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Income inequality, Trust and group affiliations, civic engagements and confidence in state institutions

Quoted statement: The results indicate that societies that are more economically unequal and lack capacity in some dimensions of social capital experienced more COVID-19 deaths. Social trust and belonging to groups were associated with more deaths, possibly due to behavioural contagion and incongruence with physical distancing policy.

34. Social capital and COVID-19: a multidimensional and multilevel approach

By: Wu, Cary

Countries of focus: China

Type of analysis: Review

Impact type: Both

Impact pathways: Levels of political trust, collective efficacy and social network

Quoted statement: Social capital affects COVID-19 response mainly through facilitating collective actions and promoting public acceptance of and compliance with control measures in the form of trust and norms at the individual level. Social capital can also help mobilize resources in the form of networks at the community level. Places with more social capital tend to have more positive responses to the pandemic and fewer confirmed cases with a slower growth rate over time

35. Social capital and public health: responding to the COVID-19 pandemic

By: Wong, Anna S. Y.; Kohler, Jillian C.

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Building trust between decision makers, healthcare workers and the public, virtual community building, fostering solidarity between high risk and low risk groups

Quoted statement: As concerns over mental health, public health policy compliance, and equitable access to healthcare services and products continue to confront the global COVID-19

response, measures that integrate considerations of bonding, bridging, and linking capital stand as immediately available options for health systems strengthening. Efforts to address the pandemic demand the participation of actors across different nationalities, socioeconomic backgrounds and political identities

36. Is it time to talk about the end of social distancing? A joinpoint analysis of COVID-19 time series in Brazilian capitals

By: Guimaraes, Raphael Mendonca; Figueiredo Mafra Magalhaes, Monica de Avelar; Xavier, Diego Ricardo; Saldanha, Raphael de Freitas; Catao, Rafael de Castro

Countries of focus: Brazil

Type of analysis: Review

Impact type: Both

Impact pathways: Eased restriction will lead to overcrowding which increases the rates of Covid cases

Quoted statement: All capitals showed an exponential or a near-exponential increase in cases through May. A decline in reported cases was subsequently noted in 20 cities but was only significant for 8 (29.6%) and was followed by a renewed increase. Thus, caution is warranted when considering the relaxation of restrictions

37. Social capital and digital interactions in Italian regions during the emergency phase Covid-19

By: Galluzzo, Nicola

Countries of focus: Italy

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Interaction through the digital media

Quoted statement: With the implementation in Italy of the prevention measures against the spread of the Covid-19, social interactions have been recalibrated through the use of digital infrastructures such as Internet, which have strengthened stable and innovative social relationships.

d) Employment

38. COVID-19 And Racial/Ethnic Disparities In Health Risk, Employment, And Household Composition

By: Selden, Thomas M.; Berdahl, Terceira A.

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: The long-standing structural inequality along racial and ethnic lines with respect to factors such limited access to health care, unemployment and poor living conditions are exacerbating the impacts of COVID-19

Quoted statement: The blacks and the Hispanics are likely to suffer from COVID-19 compared to the whites as a result of structural racism on many levels including income, education, health insurance, access to medical care and living conditions

39. Flexible employment relationships and careers in times of the COVID-19 pandemic

By: Spurk, Daniel; Straub, Caroline

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Business shut down led to loss of employment and income, school and university shutdown disrupted learning and career opportunities

Quoted statement: Most countries affected by the pandemic took several measures such as lockdowns, social distancing, schools and university closings and business shut down as a means of tracking and slowing down the spread of COVID-19.

40. Unequal pain: a sketch of the impact of the Covid-19 pandemic on migrants' employment in China

By: Che, Lei; Du, Haifeng; Chan, Kam Wing

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Meager social safety protection and job precarity has led to financial catastrophe

Quoted statement: The severe lockdowns and limitations on the movements of people had serious consequences for China's economy. The impact of the pandemic on China's low-wage workers is a question of significance, not just because of their outsized role in the economy. It is also because China took far more severe lockdown and quarantine measures, often at multiple scales

41. Navigating uncertainty, employment and women's safety during COVID-19: Reflections of sexual assault resistance educators

By: Janse van Rensburg, Margaret; Smith, Holly

Countries of focus: Canada

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Lack and access of empirical evidence has complicated the ability to support and empower women, Lockdown and social distancing have created a condition in which domestic abuse is flourishing

Quoted statement: It is becoming increasingly apparent that within this pandemic, social issues which were once prioritized are becoming harder to address. Much like sexual assault, the COVID-19 pandemic disproportionately affects marginal-ized communities in ways unique to the impacts of structural inequalities related to gender, sexuality, disability, race and socioeconomic status.

42. Psychological Aspects of Employment Instability During the COVID-19 Pandemic

By: Mimoun, Elie; Ben Ari, Amichai; Margalit, Daniella

Countries of focus: Israel

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Quarantine has resulted in loss of employment creating an immediate financial loss which in turn creates emotional and financial distress expressed by symptoms such as depression and decline in physical functioning

Quoted statement: Like many other countries, the Israeli Government enacted a quarantine (lockdown) policy. For the most part, quarantine and other restrictions changing the normal

course of life is an unpleasant experience with negative psychological effects. Research shows high prevalence of emotional distress symptoms such as pain and suffering

43. Older Workers in the Time of COVID-19: The Senior Community Service Employment

Program and Implications for Social Work

By: Halvorsen, Cal J.; Yulikova, Olga

Countries of focus: United States

Type of analysis: Review

Impact type: Negative

Impact pathways: Financial insecurity and increased physical vulnerabilities of older workers is exacerbated by the pandemic

Quoted statement: Increasing the ability and opportunity for people to stay economically, civically, and socially engaged throughout the lifespan are important aspects of the Grand Challenges for Social Work initiative. And through the novel coronavirus pandemic, these challenges have become both increasingly apparent and, often, severe.

44. Employment in the informal economy: implications of the COVID-19 pandemic

By: Webb, Aleksandra; McQuaid, Ronald; Rand, Sigrid

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Low quality employment and insufficient social protection makes collective action to improve working conditions difficult

Quoted statement: There are considerable short- and long-term implications of the pandemic for informal employment and the informal economy. This occurs against the background of unresolved tensions arising from informal workers' desire for more employment security and employers' striving for continued labour flexibility while transferring costs to government and workers. The COVID-19 pandemic might accelerate current trends and force new solutions to better protect basic work security while helping organizations to remain competitive.

45. Company Characteristics, Disability Inclusion Practices, and Employment of People with Disabilities in the Post COVID-19 Job Economy: A Cross Sectional Survey Study

By: Chan, Fong; Tansey, Timothy N.; Iwanaga, Kanako; Bezyak, Jill; Wehman, Paul; Phillips, Brian N.; Strauser, David R.; Anderson, Catherine

Countries of focus: Global

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Participating in job fairs for people with disability, promotion of advancement of diverse persons through mentoring programs, having strategies to attract qualified applications from persons with disability all promotes inclusion of people with disability

Quoted statement: In the post COVID-19 job economy, it will be more difficult to help persons with disabilities find and maintain gainful employment. Rehabilitation counselors, transition specialist, and disability service providers must make greater efforts to create employment opportunities for their clients.

46. Changes in employment and relationship satisfaction in times of the COVID-19 pandemic: Evidence from the German family Panel

By: Schmid, Lisa; Worn, Jonathan; Hank, Karsten; Sawatzki, Barbara; Walper, Sabine

Countries of focus: Germany

Type of analysis: Review

Impact type: Negative

Impact pathways: Combination of home office with home schooling could put particular strain on the relationship between parents

Quoted statement: For a sizeable share of persons, COVID-19-related interventions implied starting to work from home or increasing their home-office intensity. On average, relationship satisfaction turned out to have decreased, almost irrespective of whether respondents experienced changes in their employment situation during the COVID-19 crisis or not.

47. COVID-19 and the immediate impact on young people and employment in Australia: A gendered analysis

By: Churchill, Brendan

Countries of focus: Australia

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID-19 related restrictions have pushed young people out of the workforce. The rates of unemployment are higher in women than in men due to their over-representation in industries that have been most exposed

Quoted statement: Across all measures, labor force participation, unemployment, and underemployment, younger Australians were significantly impacted more so relative to older age groups.

48. COVID's Impacts on the Field of Labour and Employment Relations

By: Eaton, Adrienne; Heckscher, Charles

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Economic inequality, gender, racial and ethnic divides are major challenges already facing the labour markets which are elevated by the pandemic

Quoted statement: The increase in inequality has been widely discussed by labour scholars as well as the 'mainstream' field. While inequality has been more marked in the USA than in the EU, labour unions across the board have struggled to stem a trend that is growing everywhere.

49. Employment changes by employer size during the COVID-19 pandemic: a look at the Current Employment Statistics survey microdata

By: Dalton, Michael; Handwerker, Elizabeth Weber; Loewenstein, Mark A.

Countries of focus: United States

Type of analysis: Review

Impact type: Negative

Impact pathways: The Covid restrictions such as lockdowns, quarantine and social distancing has led to closure of businesses and companies leading to high rates of unemployment

Quoted statement: massive employment changes of the past few months were driven by employment losses in continuing establishments in every employer size category except for the

very smallest employers. For employers with 1 to 9 employees, job losses (and gains) were driven by employer closures and reopening. The largest employment impacts of the pandemic were for employers with 1 to 99 employees in April, but as the pandemic-induced economic crisis continued this summer, its employment impacts shifted to larger employers.

50. Income and Employment Changes Under COVID-19 Lockdown: A Study of Urban Punjab

By: Singh, Indervir; Singh, Jagdeep; Baruah, Ashapurna

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Lockdowns have resulted in significant fall of income and employment due to closure of businesses and companies that initially generated income and created jobs

Quoted statement: Countries were already looking at contraction of economic activity due to the fear

of COVID-19, while the lockdowns further aggravated the problem, leading to large-scale income and employment losses. Even the developed economies are finding it difficult to withstand the economic effect of COVID-19.

51. The motherhood penalty and The fatherhood premium in employment during covid-19: evidence from The united states

By: Dias, Felipe A.; Chance, Joseph; Buchanan, Arianna

Countries of focus: United States

Type of analysis: Review

Impact type: Negative

Impact pathways: Lay off from work has increased the rates of unemployment

Quoted statement: The effects of COVID-19 on employment rates were roughly similar for mothers, non- mothers, and non-fathers, but smaller for fathers. COVID-19 maintained the pre-pandemic patterns in employment rates for mothers, non-mothers and non-fathers, but widened the gaps in employment rates between fathers and mothers and between fathers and non-parents

52. A gendered lens on COVID-19 employment and social policies in Europe

By: Cook, Rose; Grimshaw, Damian

Countries of focus: Europe

Type of analysis: Review

Impact type: Negative

Impact pathways: Income inequalities highly affect women who are paid less than men, lack of flexible working schedule for women which affects childcare provision

Quoted statement: Although the disruption brought about by the COVID-19 crisis has the potential to reshape gender relations for everyone's benefit, there are concerns that the crisis will exacerbate underlying gender inequalities. Though these impacts are likely to be felt globally, public policy has the potential to mitigate them and to ensure a gender-sensitive recovery from the crisis.

53. Employment effects of COVID-19 across Chilean regions: An application of the translog cost function

By: Modrego, Felix; Canales, Andrea; Bahamonde, Hector

Countries of focus: Chile

Type of analysis: Review

Impact type: Negative

Impact pathways: Lockdowns have resulted in significant fall of income and employment due to closure of businesses and companies that initially generated income and created jobs

Quoted statement: Strict policies have been implemented by most governments to contain the spread of the disease during the Lockdown. As a result, around half of the world population is currently under confinement. Restrictions to production, consumption and trade start striking harshly the global and national economies

54. Sectoral Employment Dynamics in Australia and the COVID-19 Pandemic

By: Anderson, Heather; Caggiano, Giovanni; Vahid, Farshid; Wong, Benjamin

Countries of focus: Australia

Type of analysis: Review

Impact type: Negative

Impact pathways: Following social distancing policies many countries have experienced substantial falls in employment due to closure of businesses or reduced numbers of workers

Quoted statement: The introduction of policy measures designed to contain the COVID-9 pandemic has had profound effects on economies around the world, and with the advent of social distancing policies, many countries have experienced sharp and substantial falls in employment. Many businesses have closed their doors for an indefinite period of time, while others are working with reduced hours or with skeleton staff structures.

55. Universal Basic Income as a Policy Response to COVID-19 and Precarious Employment:

Potential Impacts on Rehabilitation and Return-to-Work

By: Stahl, Christian; MacEachen, Ellen

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Universal basic income offers financial stability to individuals who have lost income following COVID-19 disruptions. It also serves as safety net for those who do not qualify for other benefits due to weak employment status

Quoted statement: The COVID-19 pandemic has led to the idea of UBI taking root in the imagination of some policy-makers, although the effects of a permanent UBI remain to be understood, especially in relation to translating it into practice for work disability in comprehensive and cause-based systems.

56. New Technology, Work and Employment in the era of COVID-19: reflecting on legacies of research

By: Hodder, Andy

Countries of focus: United Kingdom

Type of analysis: Review

Impact type: Both

Impact pathways: Employment in the COVID-19 era has been affected drastically due to closure of businesses and companies, new technologies can improve the state of unemployment brought about by the effects of the pandemic

Quoted statement: As technology advances, notions of what is 'new' have continued to evolve, and it is crucial to have an expansive view of new technology, whilst at the same time acknowledging that the implications of these technologies are the product of human agency.

57. Impact of COVID-19 Pandemic on the Employment of Chinese College Graduates and Countermeasures

By: Guan, Jialin; Xu, Huijuan; Wang, Yunfeng

Countries of focus: China

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Lockdowns, social distancing and self-isolation has forced many companies to either shut down or cut the number of employees causing high rates of unemployment

Quoted statement: COVID-19 and the following lockdown measures forced many medium and small-sized companies to cut a number of their employees and job interviews for many companies have also been delayed for months

58. Remote Work and Employment Dynamics under COVID-19: Evidence from Canada

By: Gallacher, Guillermo; Hossain, Iqbal

Countries of focus: Canada

Type of analysis: Review

Impact type: Negative

Impact pathways: Workers in occupations with less possibility for remote work experienced larger employment losses due to the pandemic restrictions

Quoted statement: Social distancing is costly because some jobs cannot be performed at home. A key estimate to assess the economic impact of the coronavirus 2019 (COVID-19) pandemic is the percentage of jobs that can be done remotely.

59. China's employment stabilization policies in response to the impact of the COVID-19 pandemic

By: Zhang, Haomiao

Countries of focus: China

Type of analysis: Review

Impact type: Both

Impact pathways: The employment protection measures reduce corporate burdens and keeps job positions stable, the social insurance and employment protection policies do not include all workers

Quoted statement: Similar to the situations in European countries, the current employment protection and social insurance policies in China do not include all of the workers who are affected the most by the COVID-19 pandemic. This exclusion should be corrected by improving the accessibility of the policies; in other words, the policies should be improved to match the changed employment structure and model and should have high flexibility and resilience.

60. Impacts of the COVID-19 Pandemic on Labor Market Surveys at the German Institute for Employment Research

By: Sakshaug, Joseph W.

Countries of focus: Germany

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Risk of contracting the virus among the interviewer staff, reduced response rates, and growing demand for up-to-date data on establishment and job vacancies have slowed down activities in the labour market surveys

Quoted statement: The COVID-19 pandemic affected many aspects of IAB survey operations, including questionnaire development, data collection mode(s), sampling, fieldwork, and quality control processes. The effects varied across surveys as the surveys' operations were in different phases of the survey lifecycle when the lockdown orders took effect.

61. Envisaging employment of the non-pharmaceutical interventions in the effective containment of the COVID-19 pandemic

By: Shrivastava, Saurabh; Shrivastava, Prateek

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Isolation of cases aims to prevent transmission of the infectious disease but it also might lead to psychological disorders due to reduce social interaction, frequent handwashing with soap and water is important, closure of schools and institutions reduce the spread of virus but it also disrupts the education systems.

Quoted statement: Being a novel viral infection, till date, there is neither a vaccine available in the market to prevent the acquisition of infection, nor a therapeutic drug available to treat the disease once a patient acquires the infection. Moreover, the available scientific evidence has concluded that the most common modes of the transmission of infection between humans are through close contact or droplets. In general, for containing an infectious disease, vaccine, treatment and isolation have been identified as the primary strategies.

e) Income

62. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study

By: Robertson, Timothy; Carter, Emily D.; Chou, Victoria B.; Stegmuller, Angela R.; Jackson, Bianca D.; Tam, Yvonne; Sawadogo-Lewis, Talata; Walker, Neff

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: The COVID-19 restrictions put in place by the governments have led to loss of income, increased prices, and overburdened social safety nets will push the vulnerable groups further into poverty and increase barriers to health-care access

Quoted statement: Governments are restricting population movement by closing borders, reducing public transport, halting non-essential activities, and issuing shelter-in-place orders. These restrictions are negatively affecting economies. Lost income, increased prices, and overburdened social safety nets will push vulnerable groups further into poverty and increase financial and other barriers to health-care access. Movement restrictions will reduce physical access, exacerbated by reduced transport availability.

63. Managing COVID-19 in Low- and Middle-Income Countries

By: Hopman, Joost; Allegranzi, Benedetta; Mehtar, Shaheen

Countries of focus: Africa

Type of analysis: Review

Impact type: Both

Impact pathways: Risk communication is key to create public awareness, limited resources to increase preparedness measures

Quoted statement: With COVID-19's rapid spread in Africa, most countries will not be able to afford large-scale diagnostics. However, the pandemic can be limited when public health outbreak response strategies and tactics are implemented early. IPC programs must be strengthened by ensuring that at least minimum requirements for infection, prevention and control (IPC) are in place as soon as possible, and media partnerships should be created to prevent societal fear.

64. Bearing the brunt of covid-19: older people in low- and middle-income countries

By: Lloyd-Sherlock, Peter; Ebrahim, Shah; Geffen, Leon; Mckee, Martin

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: In times of intense quarantine conditions, the old face barriers to obtaining food and essential stuff, increasing numbers of old people in nursing homes which hinders social distancing, inability of health systems to cope with surges in demand especially for the old Covid patients who need respiratory support.

Quoted statement: It will not be easy to deal with these problems, especially where there is often weak public health infrastructure and limited trust in government. An age perspective should be included explicitly in the development of national and global planning for covid-19, and a global expert group on older people should be formed to support with guidance and response to the virus in both residential facilities and home settings.

65. Feeding Low-Income Children during the Covid-19 Pandemic

By: Dunn, Caroline G.; Kenney, Erica; Fleischhacker, Sheila E.; Bleich, Sara N.

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Food insecurity as a result of Covid disruptions can cause a long-term psychological, physical and emotional harms to children, invention of grab and go meal sites which reduces the rate of disease transmission

Quoted statement: As we grapple with Covid-19, it's critical to ensure that the nutritional needs of vulnerable children are met in order to avoid exacerbating disparities in health and educational attainment for years to come. The strategies being should be examined, and acknowledgement should be given to the broader political landscape in which they're being implemented, and improve our ability to adapt how, when, and where we provide nutritional support to children.

66. The impact of COVID-19 and strategies for mitigation and suppression in low- and middle-income countries

By: Walker, Patrick G. T.; Whittaker, Charles; Watson, Oliver J.; Baguelin, Marc; Winskill, Peter; Hamlet, Arran; Djafaara, Bimandra A.; Cucunuba, Zulma; Mesa, Daniela Olivera; Green, Will; Thompson, Hayley; Nayagam, Shevanthi; et al

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Increasing availability of oxygen support to mitigate the impacts, wide scale testing to reduce the spread of infection

Quoted statement: Mitigation strategies that slow but do not interrupt transmission will still lead to COVID-19 epidemics rapidly overwhelming health

systems, with substantial excess deaths in lower-income countries resulting from the poorer health care available. Rapid and decisive actions are critical to save lives globally

67. The COVID-19 Pandemic: Effects on Low- and Middle-Income Countries

By: Bong, Choon-Looi; Brasher, Christopher; Chikumba, Edson; McDougall, Robert; Mellin-Olsen, Jannicke; Enright, Angela

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Short supply of resources to treat patients, shortage of health care providers, lack of personal protection equipment for the health care providers

Quoted statement: The global COVID-19 situation has forced countries to take unprecedented drastic measures such as boarder closure and movement restrictions, which have ed to devastating impacts not only in health care but also on the world economy.

68. Adoption of COVID-19 triage strategies for low-income settings

By: Ayebare, Rodgers R.; Flick, Robert; Okware, Solome; Bodo, Bongomin; Lamorde, Mohammed

Countries of focus: Africa

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Training of front-line health workers to triage patients effectively by use of a modified COVID-19 screening algorithm

Quoted statement: Despite major advances in epidemic preparedness, Africa remains susceptible to COVID-19.

69. Disparities in the Population at Risk of Severe Illness From COVID-19 by Race/Ethnicity and Income

By: Raifman, Matthew A.; Raifman, Julia R.

Countries of focus: United States

Type of analysis: Review

Impact type: Negative

Impact pathways: Structural inequalities which heighten exposure to COVID-19, living in crowded households which elevate the exposure and limit options for quarantining family members

Quoted statement: Preliminary national data on cases by race/ethnicity suggest that disparities in hospitalization are already developing. Quantifying disparities in risk is important for allocating resources to prevent, identify, and treat COVID-19–related severe illness and limit diverging outcomes for already vulnerable subgroups.

70. Potential impact of the COVID-19 pandemic on HIV, tuberculosis, and malaria in low-income and middle-income countries: a modelling study

By: Hogan, Alexandra B.; Jewell, Britta L.; Sherrard-Smith, Ellie; Vesga, Juan F.; Watson, Oliver J.; Whittaker, Charles; Hamlet, Arran; Smith, Jennifer A.; et al

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Overburdened health systems due to increased number of COVID-19 cases

Quoted statement: Disruptions to the services for HIV, tuberculosis, and malaria resulting from the COVID-19 pandemic and its response could lead to a substantial number of additional deaths and years of life lost, especially when considering the years of life lost after the pandemic

71. Impact of the COVID-19 Pandemic on the Urologist's clinical practice in Brazil: a management guideline proposal for low- and middle-income countries during the crisis period

By: Carneiro, Arie; Wroclawski, Marcelo Langer; Nahar, Bruno; Soares, Andrey; Cardoso, Ana Paula; Kim, Nam Jin; Carvalho, Fabricio Torres

Countries of focus: Brazil

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Oversaturation of health system capacity as a result of high demands of PPE's ICU beds and ventilators which are scarce

Quoted statement: Similar to other specialties, the pandemic has drastically changed the routine of the urologists. Elective clinic visits are being canceled, postponed or, in some situations, replaced by remote care through telemedicine, recently regulated and temporarily authorized by the Brazilian Ministry of Health

72. Psychological interventions during COVID-19: Challenges for low and middle income countries

By: De Sousa, Avinash; Mohandas, E.; Javed, Afzal

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Lack of access to proper health care, lack of accurate disorders of psychiatric disorders, lack of catering to the needs of special populations

Quoted statement: The COVID-19 pandemic has paved the way for considerable psychological and psychosocial morbidity among the general public and health care providers especially in developing countries. Mental health interventions shall play a huge role in this pandemic and we shall be able to help people deal with the current situation via planned and progressive psychological interventions.

73. Global Access to Handwashing: Implications for COVID-19 Control in Low-Income Countries

By: Brauer, Michael; Zhao, Jeff T.; Bennitt, Fiona B.; Stanaway, Jeffrey D.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: High population densities which challenge social distancing, limited handwashing facilities with soap

Quoted statement: Low-income countries have reduced health care system capacity and are therefore at risk of substantially higher COVID-19 case fatality rates than those currently seen in high-income countries. Handwashing is a key component of guidance to reduce transmission of the SARS-CoV-2 virus, responsible for the COVID-19 pandemic

74. An appeal for practical social justice in the COVID-19 global response in low-income and middle-income countries

By: Kelley, Maureen; Ferrand, Rashida A.; Muraya, Kui; Chigudu, Simukai; Molyneux, Sassy; Pai, Madhukar; Barasa, Edwine

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Poverty among marginalized communities have led to lower capacities to absorb the shocks from the pandemic

Quoted statement: As the pandemic escalates in low and middle income countries, there is a growing call to identify locally tailored solutions because outbreaks are political, socioeconomic and public health emergencies. Practical social justice linking principles of justice with actions tailored to specific contexts can help guide decisions.

75. Social distancing responses to COVID-19 emergency declarations strongly differentiated by income

By: Weill, Joakim A.; Stigler, Matthieu; Deschenes, Olivier; Springborn, Michael R.

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Lower income communities have a lower capacity to cope with economic and health shocks, lack of social distancing due to high populations among low income communities

Quoted statement: Social distancing substantially varies by income. Wealthier areas decrease mobility significantly compared to poorer areas and this general pattern holds across income quantities, data sources and mobility measures.

76. The need for COVID-19 research in low- and middle-income countries

By: Gupta, Madhu; Wahl, Brian; Adhikari, Binita; Bar-Zeev, Naor; Bhandari, Sudip; Coria, Alexandra; Erchick, Daniel J.; Gupta, Nidhi; Hariyani, Shreya; et al

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Lack of understanding of the disease severity, lack of understanding of the impact of prevention and control interventions

Quoted statement: In many low and middle income countries, insufficient testing could have led to an underestimation of true infections. As confirmed cases increase, the ultimate impact of the pandemic on individuals and communities in low- and middle-income countries is uncertain. Targeted research activities should be done to help mitigate the potential burden of COVID-19 in these countries without diverting the limited human resources, funding, or medical supplies from response activities

77. COVID-19 and sex workers: human rights, the struggle for safety and minimum income

By: Jozaghi, Ehsan; Bird, Lorna

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Lack of qualification for employment insurance, marginalization has forced sex workers to work in risky situations in order to survive

Quoted statement: The law prohibits anyone to buy or advertise sexual services which has placed sex workers at an increased risk of poor health and safety.

78. Challenges of COVID-19 in children in low- and middle-income countries

By: Zar, Heather J.; Dawa, Jeanette; Fischer, Gilberto Bueno; Castro-Rodriguez, Jose A.

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Poor living conditions, lack of sanitation, disrupted schooling, lack of access to school feeding conditions, increased poverty levels, reduced access to health facilities

Quoted statement: Children in LMICs constitute a high proportion of the population and may have a high prevalence of risk factors for severe lower respiratory infection such as HIV or malnutrition. Further diversion of resources from child health to address the pandemic among adults may further impact on care for children.

79. The effect of age, gender, income, work, and physical activity on mental health during coronavirus disease (COVID-19) lockdown in Austria

By: Pieh, Christoph; Budimir, Sanja; Probst, Thomas

Countries of focus: Australia

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: The level of sleep quality can either affect mental health positively or negatively

Quoted statement: COVID-19 pandemic, as well as the lockdown, seems to have a major impact on mental health. Second, young adults (<35 years), women, people without work as well as with low income are significantly more burdened while physical activity has a positive association with mental health.

80. Emergency and essential surgical healthcare services during COVID-19 in low- and middle-income countries: A perspective

By: Ma, Xiya; Vervoort, Dominique; Reddy, Che L.; Park, Kee B.; Makasa, Emmanuel

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Community empowerment with accurate information on prevention, optimizing surgical material sources, providing quality training to health providers, adequate personnel protection equipment for workers on the frontline

Quoted statement: The COVID-19 pandemic resulted in significant changes in health care systems worldwide, with low- and middle-income countries (LMIC) sustaining important repercussions. Emergency and essential surgical care delivery may become affected due to the shift of human and material resources towards fighting the pandemic. Protecting surgical personnel should be a priority to allow optimal care delivery.

81. Effect of income on the cumulative incidence of COVID-19: an ecological study

By: Russo Rafael, Ricardo de Mattos; Neto, Mercedes; Depret, Davi Gomes; Gil, Adriana Costa; Silva Fonseca, Mary Hellem; Souza-Santos, Reinaldo

Countries of focus: Brazil

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Uneven access to health facilities, income disparities

Quoted statement: Cumulative incident rates of COVID-19 are influenced by one's neighborhood of residency, suggesting that access to testing is uneven.

82. Snowballing transmission of COVID-19 (SARS-CoV-2) through wastewater: Any sustainable preventive measures to curtail the scourge in low-income countries?

By: Adelodun, Bashir; Ajibade, Fidelis Odedishemi; Ibrahim, Rahmat Gbemisola; Bakare, Hashim Olalekan; Choi, Kyung-Sook

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Decentralization of wastewater treatment facilities, community wide monitoring and testing of wastewater samples, improved sanitation

Quoted statement: Most low-income countries have poor sanitation and wastewater management policies, which create potential risks of COVID 19 spread. Therefore, Preventive measures to tackle the potential risks of transmission in wastewater are such as chlorinization, ozonation and UV radiations should be put in place.

83. Impact of COVID-19 on clinical practice, income, health and lifestyle behavior of Brazilian urologists

By: Gomes, Cristiano M.; Favorito, Luciano A.; Henriques, Joao Victor T.; Canalini, Alfredo F.; Anzolch, Karin M. J.; Fernandes, Roni de C.; et al

Countries of focus: Brazil

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Income cutback have forced health workers to reduce costs in professional practices and public life, weight gain due to reduced physical activities, increased intake of alcoholic beverages

Quoted statement: The coronavirus pandemic is a major challenge for healthcare systems worldwide and has impacted the habits, economy and health systems around the world. Urologists have had a major reduction of patient visits, elective and emergency surgeries. Most have experienced a tremendous cutback in their income, especially those in private practice, prompting measures to reduce costs in professional practice and personal life

84. Early phases of COVID-19 management in a low-income country: Bangladesh

By: Monjur, Mohammad R.; Hassan, Md. Zakiul

Countries of focus: Bangladesh

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Inadequate timely testing of symptomatic patients, under-resourced testing facilities

Quoted statement: The centralized testing in the under-resourced public institutions have been unable to effectively respond to the pandemic

85. COVID-19 lockdowns in low- and middle-income countries: Success against COVID-19 at the price of greater costs

By: Madhi, Shabir A.; Gray, Glenda E.; Ismail, Nazir; Izu, Alane; Mendelson, Marc; Cassim, Naseem; Stevens, Wendy; Venter, Francois

Countries of focus: South Africa

Type of analysis: Review

Impact type: Both

Impact pathways: Emphasis on community mobilisation and education on COVID-19, use of face masks and hand hygiene, avoiding crowded places

Quoted statement: Uncalculated measures such as extended lockdown, while possibly being able to mitigate some effects of the COVID-19 pandemic, could indirectly result in non-COVID-19 morbidity and mortality. More pragmatic approaches are warranted, including emphasis on community mobilisation and education on COVID-19

86. Global resource shortages during COVID-19: Bad news for low-income countries

By: McMahon, Devon E.; Peters, Gregory A.; Ivers, Louise C.; Freeman, Esther E.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Resource shortages will lead to scarce healthcare commodities

Quoted statement: The world has been gripped by resource shortages during the COVID-19 pandemic. In order to guarantee these resources, governments around the world are bargaining for their share in a strangled global supply chain

87. Structural barriers to adhering to health behaviours in the context of the COVID-19 crisis:

Considerations for low- and middle-income countries

By: Coetzee, Bronwynne Jo'sean; Kagee, Ashraf

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Overcrowding and poor sanitation in informal settlements lead to increased rates of infection, loss of jobs and limited access to information

Quoted statement: In low and middle income countries, efforts to contain the spread of COVID-19 in densely populated communities with limited access to food, water and sanitation may seem counter-intuitive and even impossible under conditions of precarity.

88. Knowledge, attitudes and practices of COVID-19 among income-poor households in the Philippines: A cross-sectional study

By: Lau, Lincoln Leehang; Hung, Natalee; Go, Daryn Joy; Ferma, Jansel; Choi, Mia; Dodd, Warren; Wei, Xiaolin

Countries of focus: Philippines

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Insufficient information/knowledge regarding preventive measures, high levels of poverty

Quoted statement: The presence of the COVID-19 pandemic in low- and middle-income countries is raising important concerns about the preparedness of health systems within these countries to address the disease as it continues to spread. With health care facilities that were already overburdened before the pandemic, it is becoming increasingly clear that adopting the measures employed by high-income countries in LMICs may not be feasible

89. Who loses income during the COVID-19 outbreak? Evidence from China

By: Qian, Yue; Fan, Wen

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Groups with lower educational attainment faced loss of income, people with state-sector employment were protected from loss of income

Quoted statement: COVID-19 not only exacerbates pre-existing social inequalities but also creates new forms of disparities and may magnify the social distribution of economic disparities. Thus, public policies need to be oriented towards vulnerable and marginalized populations

90. Use of COVID-19 convalescent plasma in low- and middle-income countries: a call for ethical principles and the assurance of quality and safety

By: Epstein, Jay; Smid, W. Martin; Wendel, Silvano; Somuah, Daniel; Burnouf, Thierry

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Absence of well-organized blood collection systems, limited manpower and critical resources

Quoted statement: In low and middle-income countries safe blood collection and transfusion are the challenges in the absence of a well-organized and nationally regulated blood collection system and limitations of critical resources and manpower.

91. Oncology care in a lower middle-income country during the COVID-19 pandemic

By: Trehan, Amita; Jain, Richa; Bansal, Deepak

Countries of focus: India

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Nationwide lockdowns which led to closure of borders and restricted movements, social distancing

Quoted statement: The 2019 novel coronavirus disease (COVID-19) has affected all aspects of life globally and care of children with malignancies is no exception.

92. Protecting hard-won gains for mothers and newborns in low-income and middle-income countries in the face of COVID-19: call for a service safety net

By: Graham, Wendy Jane; Afolabi, Bosede; Benova, Lenka; Campbell, Oona Maeve Renee; Filippi, Veronique; Nakimuli, Annette; Penn-Kekana, Loveday; et al

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Limited availability of COVID-19 test kits, local fundraising to get PPE for maternity staff, relocating births from hospitals to other adapted locations

Quoted statement: The adverse impact of covid-19 on maternal and newborn services risks undermining improvements in health outcomes and care achieved over the past. local solutions to the direct and indirect challenges brought to maternal and newborn health services must be captured effectively

93. Will the Higher-Income Country Blueprint for COVID-19 Work in Low- and Lower Middle-Income Countries?

By: Hodgins, Stephen; Saad, Abdulmumin

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Lack of access to education, lockdowns have caused chaotic high-volume migration from cities

Quoted statement: Strategies currently pursued in high-income and upper middle-income countries aimed at suppressing incidence of COVID-19 may be unrealistic and counterproductive in most low-income countries. Instead strategies should be tailored to the setting, balancing expected benefits, potential harms and feasibility

94. Mass masking as a way to contain COVID-19 and exit lockdown in low- and middle-income countries

By: Fodjo, Joseph Nelson Siewe; Pengpid, Supa; de Moura Villela, Edlaine Faria; Vo Van Thang; Ahmed, Mohammed; Ditekemena, John; et al

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Mass masking can potentially reduce the spread of COVID-19, scarcity of masks can potentially increase infection rates in low and middle-income countries

Quoted statement: Face masks are now recommended by the World Health Organization (WHO) to prevent COVID-19 transmission, according to new guidelines published on June 5th 2020 which state that in areas with ongoing COVID-19 community transmission, governments should encourage the general public to wear masks in specific situations and settings where physical distancing cannot be achieved, as part of a comprehensive approach to suppress COVID-19 transmission

95. COVID-19 control in low-income settings and displaced populations: what can realistically be done?

By: Dahab, Maysoon; van Zandvoort, Kevin; Flasche, Stefan; Warsame, Abdihamid; Ratnayake, Ruwan; Favas, Caroline; Spiegel, Paul B.; Waldman, Ronald J.; Checchi, Francesco

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Physical distancing measures to reduce spread of the disease, limited use of public transport, reductions of mass gatherings, promoting hand washing and soap distribution

Quoted statement: In low and middle-income countries, restrictions are unlikely to prevent cases from surging thus, time limited movement restrictions should be considered as an opportunity to develop sustainable and resource appropriate mitigation strategies.

96. Is the effect of COVID-19 on children underestimated in low- and middle- income countries?

By: Simba, Justus; Sinha, Ian; Mburugu, Patrick; Agweyu, Ambrose; Emadau, Caren; Akech, Sam; Kithuci, Rosemary; Oyiengo, Laura; English, Mike

Countries of focus: Africa

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Social isolation has threatened the mental and emotional well-being of children, loss of income affects the nutritional content of children food causing malnutrition in severe cases

Quoted statement: Overall it has been documented that children are less affected. The direct effects of the COVID-19 pandemic on health appear to affect adults mainly but children are

vulnerable to the wider consequences. However, Children in LMICs are at risk of developing and dying from severe acute respiratory infections as well as other preventable causes of child mortality including diarrhea, malaria and neonatal causes.

97. Association Between State-Level Income Inequality and COVID-19 Cases and Mortality in the USA

By: Oronce, Carlos Irwin; Scannell, Christopher A.; Kawachi, Ichiro; Tsugawa, Yusuke

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Income inequality, decreased social mobility, low access to medical care

Quoted statement: Unequal impact of the pandemic across communities can be attributed to factors such as economic segregation, decreased social mobility and lower access to medical care

98. Protecting children in low-income and middle-income countries from COVID-19

By: Ahmed, Salahuddin; Mvalo, Tisungane; Akech, Samuel; Agweyu, Ambrose; Baker, Kevin; Bar-Zeev, Naor; Campbell, Harry; Checkley, William; Chisti, Mohammad Jobayer; Colbourn, Tim; Cunningham, Steve; Duke, Trevor; et al

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Severe malnutrition increases high chances of contracting the disease, nutritional anemia, low immunization uptake, low parental education and limited access to high quality acute healthcare

Quoted statement: Current data suggests that children are susceptible to COVID-19 infection but are less likely than adults to become severely ill. children are more affected by the indirect impacts of the pandemic

99. COVID-19 exposes health worker shortages in the USA and UK, but nationalism and self-interest must not exploit medical workforces from low- and middle-income countries

By: Fagan, Johannes J.; Cairncross, Lydia; Biccard, Bruce; Fieggen, Graham; Maswime, Salome

Countries of focus: USA, UK

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Shortage of doctors due to migration in search of job opportunities in the UK and US

Quoted statement: The USA and UK intend to address the shortages of medical personnel, now exposed by the COVID-19 pandemic, by recruiting doctors, nurses, rehabilitation specialists and pharmacists from low- and middle-income countries

100. Effects of the COVID-19 crisis on survey fieldwork: Experience and lessons from two major supplements to the US Panel Study of Income Dynamics

By: Sastry, Narayan; McGonagle, Katherine; Fomby, Paula

Countries of focus: United States

Type of analysis: Review

Impact type: Both

Impact pathways: Lockdowns forced respondents to stay home, challenges of working from home, caring for children and homeschooling

Quoted statement: The major effect of the pandemic was to abruptly terminate all face-to-face fieldwork effort and shift interviews from working in a centralized call center to working from home

101. Projected health-care resource needs for an effective response to COVID-19 in 73 low-income and middle-income countries: a modelling study

By: Edejer, Tessa Tan-Torres; Hanssen, Odd; Mirelman, Andrew; Verboom, Paul; Lolong, Glenn; Watson, Oliver John; Boulanger, Lucy Linda; Soucat, Agnes

Countries of focus: Global

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Poverty which leads to insufficient supply of healthcare facilities, Health care resources and laboratories should be put in place to effectively respond to the pandemic, mechanisms for mobilization need to be in place

Quoted statement: The sizeable costs of a COVID-19 response in the health sector will escalate, particularly if transmission increases. Instituting early and comprehensive measures to limit the further spread of the virus will conserve resources and sustain the response.

102. The vulnerability of low-and middle-income countries facing the COVID-19 pandemic: The case of Haiti

By: Cenat, Jude Mary

Countries of focus: Haiti

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Precarity is major factor in the spread of the disease, lack of protective equipment inability of response teams to control and prevent infections

Quoted statement: The current situation in Haiti is challenging but is similar to many other low-and middle-income countries. Faced with a lack of resources, if actions aren't taken, the hospitals treating people infected with COVID-19 could quickly become hotbeds of infection for other fragile patients, their parents, and health care professionals.

103. The Impact of COVID-19 on Health Behavior, Stress, Financial and Food Security among Middle to High Income Canadian Families with Young Children

By: Carroll, Nicholas; Sadowski, Adam; Laila, Amar; Hruska, Valerie; Nixon, Madeline; Ma, David W. L.; Haines, Jess

Countries of focus: Canada

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Loss of income paralleled with financial burdens and food insecurity, reduced physical activities due to restricted movements and isolation

Quoted statement: Key factors influencing families were balancing work with childcare and financial instability. While unhealthful behaviors appeared to have been exacerbated, healthful ones also emerged.

104. Association of outdoor activity restriction and income loss with patient-reported outcomes of psoriasis during the COVID-19 pandemic: A web-based survey

By: Kuang, Yehong; Shen, Minxue; Wang, Qiaolin; Xiao, Yi; Lv, Chengzhi; Luo, Yan; Zhu, Wu; Chen, Xiang

Countries of focus: Global

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Loss of income which led to stress, anxiety and depression

Quoted statement: Patients with psoriasis have been confronted with limited accessibility to health care and medicine due to the restrictions which followed the spread of covid-19

105. A review of the international early recommendations for departments organization and cancer management priorities during the global COVID-19 pandemic: applicability in low- and middle-income countries

By: Belkacemi, Yazid; Grellier, Noemie; Ghith, Sahar; Debbi, Kamel; Coraggio, Gabriele; Bounedjar, Adda; Samlali, Redouane; Tsoutsou, Pauletta G.; Ozsahin, Mahmut; Chauvet, Marie - Pierre; Turkan, Sedat; Boussen, Hamouda; et al

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Minimizing the risk of exposure for patients and staff, delaying locoregional therapy data to reduce risk of the disease, switching patients from intravenous to oral therapies to limit the number of inpatient visits

Quoted statement: Outbreaks of COVID-19 disease may result in the interruption of medical care provided to patients with cancer and induce undertreatment in addition to the risk of infection and death from COVID-19. Early data from China and Italy suggest that patients with cancer may be at higher risk of contracting COVID-19, particularly when multiple visits are needed, and also developing more severe forms of the disease.

106. Long-term strategies to control COVID-19 in low and middle-income countries: an options overview of community-based, non-pharmacological interventions

By: Chowdhury, Rajiv; Luhar, Shammi; Khan, Nusrat; Choudhury, Sohel Reza; Matin, Imran; Franco, Oscar H.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Zonal lockdowns should be put in place, application and lifting of lockdown measures periodically

Quoted statement: In low and middle-income countries (LMICs), strict social distancing measures (e.g., nationwide lockdown) in response to the COVID-19 pandemic are unsustainable in the long-term due to knock-on socioeconomic and psychological effects.

107. Plasma-based COVID-19 treatments in low- and middle-income nations pose a high risk of an HIV epidemic

By: Ferreira, Leonardo M. R.; Mostajo-Radji, Mohammed A.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Insufficient infrastructure for collecting and administering plasma, blood borne pathogens transmitted through transfusions

Quoted statement: Convalescent plasma therapy holds promise as a transient treatment for COVID-19. Yet, blood products are important sources of HIV infection in low- and middle-

income nations. Great care must be taken to prevent plasma therapy from fueling HIV epidemics in the developing world.

108. School closure, COVID-19 and lunch programme: Unprecedented undernutrition crisis in low-middle income countries

By: Mayurasakorn, Korapat; Pinsawas, Bonggochpass; Mongkolsucharitkul, Pichanun; Sranacharoenpong, Kitti; Damapong, Sanga

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Children in marginalized communities are faced with malnutrition and disruption of education

Quoted statement: The coronavirus disease 2019 pandemic has affected nearly 70% of children and teenagers around the world due to school closure policies. Children in low- and middle-income countries depend on free school meals; unexpected long-term school closure may adversely impact nutrition and educational outcomes as food insecurity is expected to be higher during the pandemic

109. Supporting people with severe mental health conditions during the COVID-19 pandemic: considerations for low- and middle-income countries using telehealth case management

By: Salum, Giovanni A.; Rehmenklau, Jaqueline F.; Csordas, Michele C.; Pereira, Flavia P.; Castan, Juliana U.; Ferreira, Anderson B.; Delgado, Vera B.; Bolzan, Liana de M.; et al

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Minimizing physical impact may reduce the spread of the virus but it increases the risk of destabilization resulting to crowded emergency services

Quoted statement: The coronavirus disease 2019 (COVID-19) pandemic is a global challenge to humankind. Such disasters might disproportionately affect patients with severe mental health conditions. Mitigating the risks of human physical contact is a difficult task in mental health community centers because minimizing physical contact implies reducing face-to-face patient interactions, a key component of mental health treatment.

110. Radical Incrementalism and Trust in the Citizen: Income Security in Canada in the Time of COVID-19

By: Robson, Jennifer

Countries of focus: Canada

Type of analysis: Review

Impact type: Both

Impact pathways: Evolution of income support policy during the pandemic and creation of new national programs to take action on financial effects

Quoted statement: Canada's income security response to COVID-19 has not, despite the rapid pace of change, been a story of a sudden and sweeping overhaul to its social safety net. Instead, policy responses on income security evolved in a more stepwise and incremental fashion, building on past practice and responding iteratively to emerging challenges

111. A Socioeconomic Paradox in the COVID-19 Pandemic in Italy: a Call to Study Determinants of Disease Severity in High and Low-Income Countries

By: Bonaccio, Marialaura; Iacoviello, Licia; Donati, Maria Benedetta; de Gaetano, Giovanni

Countries of focus: Italy

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Barriers to accessing health facilities due to poverty in marginalized communities

Quoted statement: There is a well-established socioeconomic gradient in health, with more vulnerable groups experiencing a higher risk of disease/mortality, possibly resulting from a variety of societal and economic processes, unequally distributed within or between populations.

112. Income security during public health emergencies: the COVID-19 poverty trap in Vietnam

By: Tran, Phuong Bich; Hensing, Gunnel; Wingfield, Tom; Atkins, Salla; Sidney Annerstedt, Kristi; Kazibwe, Joseph; Tomeny, Ewan; Biermann, Olivia; et al

Countries of focus: Vietnam

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Putting up of social protection schemes such as insurance and microfinancing will be of help the poor in the society **Quoted statement:** Vietnam's proximity to China increased the early risk assessment for COVID-19 spread and the resulting response has posed a heavy impact on the country's economy and supply chain. To ensure socioeconomic stability and confidence

, social protection schemes (e.g. social insurance, microfinancing) must be in place to help people cope with the loss of income security and reduced confidence in society.

113. The need to implement non-industry COVID-19 clinical trials in non-high-income countries

By: Dal-Re, Rafael; Carcas, Antonio J.; Sreeharan, Nadarajah

Countries of focus: Global

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Poverty hinders residence of low-income countries from accessing proper health care facilities, Covid-related restrictions exacerbate the challenges that already exist among marginalized communities

Quoted statement: COVID-19 spares no national boundaries and is spreading rapidly in both high-income and non-high-income countries. The lack of approved therapies and the absence of a vaccine for COVID-19 have led to the repositioning of some existing medications with well-defined benefit-risk profiles in other indications. It is important to note that none of these medications have sufficient evidence on benefit-risk in COVID-19 patients, and should therefore be considered as experimental therapies, with an urgent need to collect data that will facilitate or prevent their use in COVID-19 patients

114. Easier access to mechanical ventilation worldwide: an urgent need for low income countries, especially in face of the growing COVID-19 crisis

By: Guerin, Claude; Levy, Patrick

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Poor sanitation caused by lack of water and soap are potential causes of spread of the virus, insufficient health care resources have led to a spike in the Covid cases

Quoted statement: The growing COVID-19 crisis threatens to disproportionately hit developing countries, not only as a health crisis in the short term but as a devastating social and economic crisis over the months and years to come. Under-resourced hospitals and fragile health systems are likely to be overwhelmed. This may be further exacerbated by a spike in cases

115. Impact of COVID-19 on mental health in a Low and Middle-Income Country

By: Silva Castro-de-Araujo, Luis Fernando; Machado, Daiane Borges

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Social isolation threatens the mental and emotional well-being of humans, and may lead to depression, misleading information from news outlets and social media can elevate restlessness

Quoted statement: Mental disorders (MD) are commonly comorbid with cardiovascular, metabolic, and some infectious diseases. Since the current epidemic is affecting the most multimorbid individuals, we might expect that the epidemic will be particularly problematic for people with MD.

116. COVID-19 Pandemic: Is This a Good Time for Implementation of Home Programs for Children's Rehabilitation in Low- and Middle-Income Countries?

By: Longo, Egmar; de Campos, Ana Carolina; Schiariti, Veronica

Countries of focus: Brazil

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Establishing a collaborative partnership where parents are experts at knowing their child and home environment, having the child and parent setting goals about what they would like to improve

Quoted statement: Low and middle-income countries like face additional challenges regarding the care of children with disabilities. In the midst of this whirlwind of information, families of children with disabilities continue to seek rehabilitation services to keep their children undergoing physical, occupational, or speech therapies

117. COVID-19: the rude awakening for the political elite in low- and middle-income countries

By: Viens, A. M.; Eyawo, Oghenowede

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Inadequate staffing has led to poor healthcare systems; Financial waste has led to lack of emergency funding to cater for the affected populations during the pandemic

Quoted statement: Decades of bad political choices by the elite class has resulted in weakened health systems in many low- and middle-income countries. The resulting lack of high-quality care and poor health outcomes are typically only borne by those of lower socio-economic standing with the elites and their families being able to seek care in high-income countries.

118. Leaving no stone unturned in light of the COVID-19 faecal-oral hypothesis? A water, sanitation and hygiene (WASH) perspective targeting low-income countries

By: Gwenzi, Willis

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Poor hygiene and food handling practices, raw wastewater-based production systems, untreated contaminated drinking water, poor social security and health care systems with low capacity to cope with disease outbreaks

Quoted statement: The human coronavirus disease is now a global pandemic. Social distancing, hand hygiene and the use of personal protective equipment dominate the current fight against COVID-19. In developing countries, the need for clean water provision, sanitation and hygiene has only received limited attention. The current perspective examines the latest evidence on the occurrence, persistence and faecal-oral transmission of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), the etiological agent causing COVID-1

119. Disability-inclusive responses to COVID-19: Lessons learnt from research on social protection in low- and middle-income countries

By: Banks, Lena Morgon; Davey, Calum; Shakespeare, Tom; Kuper, Hannah

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Loss of income may affect households of people with disability since only a few can work, disruptions of health and social services that persons with disability require, availability fewer coping mechanisms for households with disability makes them more vulnerable to the pandemic

Quoted statement: The one billion people living with disabilities globally already face a heightened risk of poverty, which will likely be exacerbated by the COVID-19 pandemic unless interventions to address its economic impacts are disability-inclusive.

120. COVID-19 implications on household income and food security in Kenya and Uganda:

Findings from a rapid assessment

By: Kansiime, Monica K.; Tambo, Justice A.; Mugambi, Idah; Bundi, Mary; Kara, Augustine; Owuor, Charles

Countries of focus: Africa

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Income shocks have led to food insecurity and poor dietary quality

Quoted statement: Results show that more than two-thirds of the Population experienced income shocks due to the COVID-19 crisis. Food security and dietary quality worsened and the frequency of consumption of nutritionally rich foods was significantly low. The ongoing and future government responses should focus on structural changes in social security by developing responsive packages to cushion members pushed into poverty by such pandemics while building strong financial institutions to support the recovery of businesses in the medium term, and ensuring the resilience of food supply chains particularly those making available nutrient-dense foods.

121. Evidence synthesis communities in low-income and middle-income countries and the COVID-19 response Comment

By: Stewart, Ruth; El-Harakeh, Amena; Cherian, Sunu Alice

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Inequalities and inequities in poorer countries worsen the vulnerability to COVID-19, violence against women and children, social economic pressures resulting from lockdowns

Quoted statement: COVID-19 and its related impacts are likely to be felt for many years to come. Paramount to poorer and conflict-affected states are the pre-existing, and rapidly worsening, vulnerabilities due to inequalities and inequities, unemployment, hunger, and malnutrition. COVID-19 has exacerbated these effects in low and middle-income countries

122. Intensive care for COVID-19 in low- and middle-income countries: research opportunities and challenges

By: Salluh, Jorge I. F.; Burghi, Gaston; Haniffa, Rashan

Countries of focus: India and Brazil

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Limited access to emergency and critical care beds, inadequate oxygen supplies, and shortages in staffing and infrastructure is worsening the situation,

Quoted statement: Critical care provision in LMICs is challenging in non-pandemic times with the quality of care and outcomes in these settings. The pandemic has disrupted health system structure and organization, resulting in a de-prioritization of healthcare evaluation, improvement and research.

123. Intersecting Vulnerabilities: The Impacts of COVID-19 on the Psycho-emotional Lives of Young People in Low- and Middle-Income Countries

By: Banati, Perna; Jones, Nicola; Youssef, Sally

Countries of focus: Ethiopia and Lebanon

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Chronic poverty, conflicts and displacement, coupled with weak health, education and protection systems provide a backdrop to many adolescent lives.

Quoted statement: COVID-19 pandemic is increasing levels of anxiety and stress. In calling for greater attention to people's psychosocial and emotional well-being, global actors have paid insufficient attention to the realities of the pandemic in low- and middle-income countries, where millions of people are already exposed to intersecting vulnerabilities.

124. COVID19 in children with cancer in low- and middle-income countries: Experience from a cancer center in Chennai, India

By: Radhakrishnan, Venkatraman; Ovet, Jerin; Rajendran, Aruna; Kolluru, Saikrishna; Pai, Vishwajeeth; Gnanaguru, Vijay; et al

Countries of focus: India

Type of analysis: Review

Impact type: Negative

Impact pathways: Crowded outpatient clinics due to lack of proper health facilities increase vulnerability in children and caregivers

Quoted statement: Crowded outpatient clinics and common wards in many hospitals in low and middle-income countries predispose children, caregivers, and health care workers to infection with severe acute respiratory syndrome coronavirus 2

125. Neighborhood income and physical distancing during the COVID-19 pandemic in the United States

By: Jay, Jonathan; Bor, Jacob; Nsoesie, Elaine O.; Lipson, Sarah K.; Jones, David K.; Galea, Sandro; Raifman, Julia

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Physical distancing has placed some barriers on low income neighbourhoods because they have to work outside their homes

Quoted statement: Individuals in high-income neighbourhoods increased their days at home substantially more than individuals in low-income neighbourhoods did. Residents of low-income neighbourhoods were more likely to work outside the home, compared to residents in higher income neighbourhoods, but were not more likely to visit locations such as supermarkets, parks and hospitals.

126. Plasma-based COVID-19 treatments in low-and middle-income countries and the risk of transfusion-transmitted infections

By: Epstein, Jay; Smid, W. Martin; Wendel, Silvano; Somuah, Daniel; Burnouf, Thierry

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Insufficient infrastructure for collecting and administering plasma, blood borne pathogens transmitted through transfusions

Quoted statement: Convalescent plasma therapy holds promise as a transient treatment for COVID-19. Yet, blood products are important sources of HIV infection in low- and middle-income nations. Great care must be taken to prevent plasma therapy from fueling HIV epidemics in the developing world.

127. Effective approaches towards eliminating cervical cancer from low-and middle-income countries amid COVID-19 pandemic

By: Rahman, Md Sazedur; Gultekin, Murat; Lassi, Zohra S.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Conduction of community-based HPV vaccination and cervical screening test programmes to reduce the prevalence and mortality of cervical cancer

Quoted statement: COVID-19 pandemic has severely affected healthcare services and coverage. The present situation has disrupted the vaccination and screening programs even in developed countries because of border closures, mass level lockdown, and disruption in flights, transportation and human resource services.^{5–8} This might increase the risk of developing cervical cancer in women, which is a public health concern

128. Diverse Responses of the Biobanks in Indo-Pacific Rim Region During the COVID-19 Pandemic: Case Scenarios from Two Low- and Middle-Income Countries and Two High-Income Countries in the Indo-Pacific Rim Region

By: Yadav, Birendra Kumar; Ng, Wayne; Fachiroh, Jajah; Tsuruyama, Tatsuaki; Furuta, Koh

Countries of focus: Indonesia, India, Australia and Japan

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Less developed infrastructure, importation of consumables

Quoted statement: The biobanks in LMIC such as India and Indonesia faced more challenges in comparison with those in high-income country (HIC) due to less developed infrastructure and reliance on the importation of consumables. The Japanese biobanks had limited issues with liquid nitrogen supply, while the VCB had managed its equipment and consumables through the predeveloped protocol.

129. Income assurances are a crucial factor in determining public compliance with self-isolation regulations during the COVID-19 outbreak - cohort study in Israel

By: Bodas, Moran; Peleg, Kobi

Countries of focus: Israel

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Self isolation has led to decreased or no income in the affected populations which results to a chain of challenges such as food insecurity, anxiety and depression

Quoted statement: Public perception of the COVID-19 outbreak change over time to reflect fluctuations in the perception of the severity of the risk. as the disease progressed, Israelis responded with increased levels of worry and heightened perception of public panic

130. The COVID-19 pandemic: Time for a universal basic income?

By: Johnson, Andrew F.; Roberto, Katherine J.

Countries of focus: United States

Type of analysis: Review

Impact type: Positive

Impact pathways: simple basic income system could help to reduce inefficiency, redundancy. Mentation and regulation of a universal

Quoted statement: As governments work to respond to the pandemic and prepare for future ones, universal basic income is a possible policy answer for relief. Implementation of any social program creates long-term implications for individuals, society, and organizations. Society and the political process must address fundamental questions about wealth redistribution and the state's role in providing for citizens.

131. Depression and Anxiety During the COVID-19 Pandemic in an Urban, Low-Income Public University Sample

By: Rudenstine, Sasha; McNeal, Kat; Schulder, Talia; Ettman, Catherine K.; Hernandez, Michelle; Gvozdieva, Kseniia; Galea, Sandro

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Low levels of income as a result of unemployment resulted in anxiety and depression

Quoted statement: In the context of COVID-19, the prevalence of self-reported depression and anxiety symptoms was skewed toward moderate to severe levels. The levels of depression and anxiety symptoms documented in this study were higher than those documented among university students before COVID-19.

132. Maintaining population health in low- and middle-income countries during the COVID-19 pandemic: Why we should be investing in Community Health Workers

By: Palafox, Benjamin; Renedo, Alicia; Lasco, Gideon; Palileo-Villanueva, Lia; Balabanova, Dina; McKee, Martin

Countries of focus: United Kingdom

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Coordination of clear guidelines that define the contribution of community health care workers, provision of infection control training, lack of training and

Quoted statement: Community health workers in low- and middle-income country primary health care systems are well suited to perform essential functions on the frontlines of Covid-19 pandemic responses. However, clear and coordinated guidance, updated infection control training, and reliable access to personal protective equipment must be ensured in order to deploy them safely and effectively.

133. Income and Employment Changes Under COVID-19 Lockdown: A Study of Urban Punjab

By: Singh, Indervir; Singh, Jagdeep; Baruah, Ashapurna

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Loss of employment was high in the illiterate and less educated in the society

Quoted statement: While the developed world has well-functioning social security system to shield its citizens from its adverse consequences, people in developing countries are at the risk of falling into deprivation. Imposing the lockdown had further increased the hardship of people.

134. Evaluation of a novel community-based COVID-19 'Test-to-Care' model for low-income populations

By: Kerkhoff, Andrew D.; Sachdev, Darpun; Mizany, Sara; Rojas, Susy; Gandhi, Monica; Peng, James; Black, Douglas; Jones, Diane; Rojas, Susana; et al

Countries of focus: United States

Type of analysis: Review

Impact type: Positive

Impact pathways: Provision of COVID-19-related education and information about available community resources, home deliveries of material goods to facilitate safe isolation and quarantine

Quoted statement: COVID-19 disproportionately affects racial and ethnic minorities in the United States. Following diagnosis with COVID-19, low-income Latinx and other socioeconomically vulnerable populations face considerable logistical and financial challenges to safely isolate and quarantine. Without the availability of a comprehensive model of care that can overcome barriers to the required isolation and quarantine, low-income persons are unlikely to undertake testing for COVID-19.

135. Cost-effectiveness and return on investment of protecting health workers in low- and middle-income countries during the COVID-19 pandemic

By: Risko, Nicholas; Werner, Kalin; Offorjebe, O. Agatha; Vecino-Ortiz, Andres I.; Wallis, Lee A.; Razzak, Junaid

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Investment in wide-scale production and distribution of PPE's will help save many lives. Many low-income countries lack the resources to acquire proper PPE's for their health workers

Quoted statement: The global shortage of PPE has become a critical issue given the high risk of COVID-19 transmission to HCWs during care encounters. Scarcity is highest in LMICs, where projections estimate the pandemic's impact will be the heaviest.

136. Antimicrobial Resistance in Agri-Food Chain and Companion Animals as a Re-emerging Menace in Post-COVID Epoch: Low-and Middle-Income Countries Perspective and Mitigation Strategies

By: Bandyopadhyay, Samiran; Samanta, Indranil

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Financial losses from issues such as high morbidity, mortality and poor sanitation on farms

Quoted statement: Antimicrobial resistance (AMR) leads to enormous financial losses from issues such as high morbidity, mortality, man-days lost, hospital length of stay, healthcare, and social costs. In humans, over prescription of antimicrobials, which is presumably higher during COVID, has been identified as the major source of selection for antimicrobial resistant bacteria

137. The Impact of COVID-19 on the Delivery of Critical Health Care: Experience from a Non-High-Income Country

By: Kumanan, Thirunavukarasu; Rajasooriyar, Chrishanthi; Guruparan, Mahesan; Sreeharan, Nadarajah

Countries of focus: Sri Lanka

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Restrictive measures such as lockdowns and limitations on travel affects patients with serious illness by limiting access to critical care facilities

Quoted statement: The impact of COVID-19 on the delivery of health care services has been immense, and even well-developed systems in high-income countries have struggled to cope with the surge of patients. Furthermore, it is recognized that the restrictive measures including lockdowns and limitations on travel could also adversely affect patients with serious illnesses, such as noncommunicable diseases and cancer by limiting access to preventive and therapeutic services.

138. Covid-19: 120 million rapid tests pledged to low and middle income countries

By: Mahase, Elisabeth

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: The test is faster and cheaper than laboratory based tests and will enable countries to increase the pace of testing, the test provides preliminary test results and negative result will not rule out COVID-19 infection thus can not be used as sole basis for treatment or other management decisions

Quoted statement: Low and middle income countries have been pledged 120 million covid-19 diagnostic tests, which can provide results in 15 to 30 minutes, by a group of organisations including the Bill and Melinda Gates Foundation and the World Health Organization.

139. Using a rapid assessment methodology to identify and address immediate needs among low-income households with children during COVID-19

By: Sharma, Shreela, V; Haidar, Amier; Noyola, Jacqueline; Tien, Jacqueline; Rushing, Melinda; Naylor, Brittni M.; Chuang, Ru-Jye; Markham, Christine

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Loss of employment has left parents with little or no resources to meet their family needs leading to food insecurities and financial hardship

Quoted statement: The COVID-19 pandemic has had a major impact on the U.S. economy leading to a worldwide economic crisis. The most vulnerable populations in our communities have been disproportionately affected by the direct and indirect health, social, and financial hardships of COVID-19. It is therefore imperative that pertinent health, financial, and critical needs resources are provided in a timely matter to families and communities in need.

140. Effect of Income Level and Perception of Susceptibility and Severity of COVID-19 on Stay-at-Home Preventive Behavior in a Group of Older Adults in Mexico City

By: Irigoyen-Camacho, Maria Esther; Velazquez-Alva, Maria Consuelo; Zepeda-Zepeda, Marco Antonio; Cabrer-Rosales, Maria Fernanda; Lazarevich, Irina; Castano-Seiquer, Antonio

Countries of focus: Mexico

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: The high prevalence of obesity and hypertension in Mexico further increases the risk of mortality in COVID-19 cases, the older group with low income and education levels have poor health standards which have increased the severity of the Pandemic

Quoted statement: The pandemic affects all age groups; however, the case-fatality rate is higher among persons of 65 years and above. Therefore, it is important to investigate the knowledge, perception and practices of older people to develop adequate and rapid strategies to contain the epidemic. There is a socioeconomic gradient for morbidity and mortality rates and a strong association between low income and poor health, with lower socioeconomic groups carrying a higher burden of the disease

141. COVID-19 Pandemic Preparing to care for patients with cancer from the perspective of low- and middle-income countries

By: Galassi, Annette; Augustinho Teixeira, Tamara Otsuru; Lopes De Domenico, Edvane Birelo; Al-Ruzzieh, Majeda; Oti, Naomi Oyoe Ohene; Sukumaran, Surya

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Extreme poverty, lack of access to clean water, sanitation and hygiene and insufficient health facilities make it difficult to care for cancer patients due to high chances of disease transmission

Quoted statement: The challenges faced by low- and middle-income countries (LMICs) in preparing for the COVID-19 pandemic are compounded by existing issues, such as extreme

poverty and lack of access to clean water, sanitation, and hygiene facilities. Approaches to educating patients about prevention of coronavirus infection in LMICs include posters, telephone calls, short message service text messages, and hospital public address system announcements.

142. The trouble with trust: Time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries

By: Elgar, Frank J.; Stefaniak, Anna; Wohl, Michael J. A.

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Social capital has both positive and negative impacts such as social distancing and isolation reduced the spread of the virus while at the same time causing anxiety and depression in isolated patients, income inequality escalates the impacts of the virus especially in poor communities compared to the high income communities

Quoted statement: COVID-19 mortality relates to income inequality and specific dimensions of social capital after other cross-national differences in wealth, population size, and population age were controlled.

143. A commentary on The trouble with trust: Time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries

By: Lindstrom, Martin

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Social capital has both positive and negative impacts, eg, social distancing and isolation reduced the spread of the virus while at the same time causing anxiety and depression in isolated patients, income inequality escalates the impacts of the virus especially in poor communities compared to the high income communities

Quoted statement: COVID-19 mortality relates to income inequality and specific dimensions of social capital after other cross-national differences in wealth, population size, and population age were controlled.

144. COVID-19 response in low- and middle-income countries: Don't overlook the role of mobile phone communication

By: Verhagen, Lilly M.; De Groot, R.; Lawrence, C. A.; Taljaard, J.; Cotton, M. F.; Rabie, H.

Countries of focus: Africa

Type of analysis: Review

Impact type: Positive

Impact pathways: Cellphone messaging enhances surveillance and tracking of disease spread and it ensures effective communication with patients and communities without having to be in close contact

Quoted statement: The (COVID-19 pandemic illustrates the importance of public health response strategies for timely outbreak control. The rapidly increasing access to mobile phones and smartphone technology among healthcare staff and citizens provides huge potential for public health workers, frontline clinicians, and institutions to communicate and act swiftly in the setting of rapidly changing COVID-19 guidelines

145. Social Determinants of Health-Related Needs During COVID-19 Among Low-Income Households With Children

By: Sharma, Shreela, V; Chuang, Ru-Jye; Rushing, Melinda; Naylor, Brittni; Ranjit, Nalini; Pomeroy, Mike; Markham, Christine

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Health inequities, which result in a disproportionately greater prevalence of obesity, diabetes, respiratory disorders and other predisposing conditions, financial instability due to unemployment has caused food insecurities and malnutrition in children

Quoted statement: The COVID-19 pandemic is occurring in the context of a global economic crisis, both of which highlight health and social challenges for the most vulnerable people in our communities.

146. Distribution of the labor income and poverty in Mexico during COVID-19 pandemic.

Scenarios and potential impacts

By: Salas, Carlos; Quintana, Luis; Mendoza, Miguel Angel; Valdivia, Marcos

Countries of focus: Mexico

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: The pandemic has disrupted many economic activities leading to loss of jobs and income especially in poor and marginalized communities who are already facing pre-existing challenges such as racial discrimination and income inequality

Quoted statement: The pandemic stroke in the context of an incipient process of real wages and employment growth, which began in 2019, and results show that the slowdown in activities derived from the health emergency, both in Mexico and in the world, caused an increase in poverty and extreme poverty, in addition to the growth of inequality

147. Letter to the Editor: COVID-19 & Neurosurgical Training in Low- and Middle-Income Countries

Countries

By: Kanmounye, Ulrick Sidney; Ammar, Adam; Esene, Ignatius; El Ouahabi, Abdessamad; Park, Kee

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: extreme poverty in low income countries had hindered medical trainings due to lack of proper health facilities, digital technology is playing an increasing role in education and continuing professional development

Quoted statement: Although the current COVID-19 pandemic has had a sudden and negative effect on the ability to train neurosurgeons, especially in LMICs, the increased use of social media and virtual platforms is markedly improving the interactions between the leadership of the WFNS and neurosurgeons around the globe.

148. Performance of a qualitative rapid chromatographic immunoassay to diagnose COVID-19 in patients in a middle-income country

By: Costa, Silvia Figueiredo; Buss, Lewis; Sanchez Espinoza, Evelyn Patricia; Vieira Jr, Jose Mauro; de Oliveira da Silva, Lea Campos; de Souza, Regina Maia; Neto, Lauro Perdigao; et al

Countries of focus: Brazil

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: The ELISA test has the advantage of being automated and therefore can be used on a large scale which enables mass testing

Quoted statement: There is a high sensitivity and specificity for the Wondfo RCI for the diagnosis of COVID-19 using plasma samples. Sensitivity was highest after 14 days from symptom onset. ELISA and qualitative rapid chromatographic immunoassays can also be used for the diagnosis of RT-PCR-negative patient

149.COVID-19 rapid diagnostic test could contain transmission in low- and middle-income countries

By: Olalekan, Adesola; Iwalokun, Bamidele; Akinloye, Oluwabukola M.; Popoola, Olayiwola; Samuel, Titilola A.; Akinloye, Oluyemi

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: The specificity of RDT kits increases access to testing and better triaging of COVID-19 patients

Quoted statement: Considering the peculiarity of LMICs, especially their economic situation, the standard RT-PCR may not be able to cope with the testing needs of these countries because of limited infrastructure and human resources. Generally, it is agreed that rapid testing techniques are useful for screening for early detection of symptomatic cases, which is crucial for averting community or hospital transmission and strengthening contact tracing and active surveillance.

150.Paucity of COVID-19 dermatology literature from low- and middle-income countries

By: Pendse, R. S.; Schwartz, B. L.; Jia, J. L.; Bailey, E. E.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Insufficient information on ways to control the pandemic has led to increased rates of infections

Quoted statement: The scarcity of published COVID-19 publications has implications on the current clinical practice and pandemic control. Prioritization of inclusion of COVID-19 dermatological literature from MICs and LICs to improve our clinical understanding of COVID-19 is key.

151.A Syndemic Perspective on the Management of Non-communicable Diseases Amid the COVID-19 Pandemic in Low- and Middle-Income Countries

By: Yadav, Uday Narayan; Rayamajhee, Binod; Mistry, Sabuj Kanti; Parsekar, Shradha S.; Mishra, Shyam Kumar

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Social distancing and stress have led to psychological problems leading to global increase in suicides, self-isolation disproportionately affects adults, migrants, laborers and refugees to poverty and lack of access to health facilities

Quoted statement: COVID-19 and non-communicable diseases have a reciprocal effect on each other; NCDs increase vulnerability to COVID-19, and COVID-19 increases NCD-related risk factors. The COVID-19 pandemic may not be the last to threaten the global community.

Therefore, there is a need to understand the drivers of the syndemic and design safety nets. The health system must address not just one or some medical problems but ensure holistic care for those that need it

152.Challenges to peer support in low- and middle-income countries during COVID-19

By: Mpango, Richard; Kalha, Jasmine; Shamba, Donat; Ramesh, Mary; Ngakongwa, Fileuka; Kulkarni, Arti; Korde, Palak; Nakku, Juliet; Ryan, Grace K.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID-19 restrictions such as lockdowns has restricted access to services such as health facilities, food and clean water and further contributing to loneliness leading to mental health

Quoted statement: Inequalities in terms of access to mobile technologies, as well as to secure employment and benefits, put peer support workers in particularly vulnerable situations precisely when they and their peers are also at their most isolated. Establishing more resilient peer support services requires attention to the already precarious situation of people with severe mental health conditions in low-resource settings, even before a crisis like Covid-19 occurs.

153.COVID-19 and haematology services in a cancer centre from a middle-income country: adapting service delivery, balancing the known and unknown during the pandemic

By: Radhakrishnan, Vivek S.; Nair, Reghu K. Sukumar; Goel, Gaurav; Ramanen, Venkatraman; Chandy, Mammen; Nair, Reena

Countries of focus: India

Type of analysis: Review

Impact type: Negative

Impact pathways: Social distancing led to cancellation of academic research activities, shortage of PPE's is a potential pathway to infection increase, scarcity of isolation facilities

Quoted statement: The COVID-19 pandemic has caused major disruptions in multiple spheres of healthcare delivery in the world. Developing nations have had to tackle this unanticipated crisis in the midst of various other healthcare delivery issues and resource constraints. The primary challenges related to infection control included infection screening and decreasing exposure among patients and healthcare workers.

154.Ethical and human rights considerations in public health in low and middle-income countries: an assessment using the case of Uganda's responses to COVID-19 pandemic

By: Barugahare, John; Nakwagala, Fredrick Nelson; Sabakaki, Erisa Mwaka; Ochieng, Joseph; Sewankambo, Nelson

Countries of focus: Uganda

Type of analysis: Review

Impact type: Negative

Impact pathways: Mandatory quarantine and social distancing affects the marginalized population due to restricted access to food and other basic needs given that the country has no capacity to cater for their needs during this period

Quoted statement: In response to COVID-19 pandemic, the Government of Uganda adopted public health measures to contain its spread in the country. Some of the initial measures included refusal to repatriate citizens studying in China, mandatory institutional quarantine, and social

distancing. Despite being a public health emergency, the measures adopted deserve critical appraisal using an ethics and human rights approach.

155.COVID-19 pandemic and an early career mental health researcher from a low and middle income country: Is there any light at the end of the tunnel?

By: Ghosh, Abhishek

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Poverty, poor infrastructure and limited healthcare capacity has hindered research in mental health services as all the funding is channeled towards clinical care and research in COVID-19.

Quoted statement: Researchers, earlier in their career, encounter challenges ranging from lack of meaningful mentorship to a pressure to publish. However, limited funding opportunity has been a more specific problem, experienced by a large majority of early career researchers from low and middle-income countries, where senior scholars have preferential access to the available funds

156.COVID-19 lockdown and penalty of joblessness on income and remittances: A study of inter-state migrant labourers from Assam, India

By: Guha, Pradyut; Islam, Bodrul; Hussain, Md Aktar

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Migrants enjoy limited human labour rights and face exploitative working conditions which has been exacerbated by the pandemic through loss of income

Quoted statement: The prolonged period of lockdown paralyzed the economy by fully or partially affecting the three sectors of economy causing a fall in aggregate demand, affecting production process and labour market, trade and industry, supply chain, public health system and society at large. There was a massive disruption in offline and manual work and employment with the announcement of nationwide lockdown. Consequently, tens of millions of migrant workers, forced to return home after losing their employment and income in their home countries

157.Technology for Educational Purposes Among Low-Income Latino Children Living in a Mobile Park in Silicon Valley: A Case Study Before and During COVID-19

By: Kim, Claire Ji Hee; Padilla, Amado M.

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Poverty hinders parents from internet installation at home for school related purposes, lack of access to technological devices such as computers and tablets, limited access to communication channels with teachers continue due to limitations in English proficiency

Quoted statement: There are major barriers that low-income families face in the context of access to technology for school-related purposes. Although the digital divide between Hispanics and whites and other non-Hispanic racial groups has begun to narrow, several intertwined socio-economic characteristics such as low levels of education and limited English ability still perpetuate the gap in Internet usage

158. Working from home and income inequality: risks of a 'new normal' with COVID-19

By: Bonacini, Luca; Gallo, Giovanni; Scicchitano, Sergio

Countries of focus: Italy

Type of analysis: Review

Impact type: Both

Impact pathways: Working from home has the potential to minimise the risk of exposure while still working, it has also led to income inequality as thousands of people have been laid off work due to restrictions of COVID-19 which has led to loss of jobs especially in the labour market

Quoted statement: In the current context of the COVID-19 pandemic, working from home (WFH) became of great importance for a large share of employees since it represents the only option to both continue working and minimise the risk of virus exposure. Working from home risks to exacerbate the pre-existing inequalities in the labor market if not regulated adequately

159. Routine Vaccination Disruption in Low-Income Countries: An Impact of COVID-19 Pandemic

By: Hossain, Md. Moyazzem; Abdulla, Faruq; Karimuzzaman, Md.; Rahman, Azizur

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Lockdown has resulted to delays or failures in vaccination of children which may lead to morbidity and mortality, disruptions of immunization programs threatens to slow down improvements against vaccine preventable diseases

Quoted statement: Due to the lockdown measures taken by most of the countries and decline in the number of commercial flights as well as the other modes of transportation there is interruption of the supply chain of lifesaving vaccines. The failures or delays in the vaccination of children may lead to increase in morbidity and mortality in low-income countries.

160. Digital psychiatry in low- and middle-income countries post-COVID-19: Opportunities, challenges, and solutions

By: Naeem, Farooq; Husain, M. Omair; Husain, M. Ishrat; Javed, Afzal

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Digital health services perform more efficiently overcoming geographical and practical barriers of engagement allowing patients to receive care faster, most countries lack digital health architecture, health information exchange which undermine the potential benefits of digital technologies

Quoted statement: Health systems are adapting to the unique challenges posed by the COVID-19 pandemic. Social distancing has forced clinicians to provide their services through online platforms in high income countries. Similar trends have been noticed in Low and middle-income countries (LAMIC). Digital health can help LAMIC address traditional barriers to care by overcoming issues related to stigma, discrimination, staffing, and physical and geographical resource constraints.

161. RATIONALE FOR THE ROUTINE APPLICATION OF LUNG ULTRASOUND IN THE MANAGEMENT OF CORONAVIRUS DISEASE 2019 (COVID-19) PATIENTS IN MIDDLE-TO LOW-INCOME COUNTRIES

By: Antunez-Montes, Omar Yassef; Buonsenso, Danilo; Paz-Ortega, Sergio Omar

Countries of focus: Mexico

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Covid restrictions have led to reduced access to care and imaging studies for both hospitalized and walk-in patients lowering the accuracy in physical examinations

Quoted statement: The global COVID-19 pandemic is an unprecedented event that is overloading the health services. it has led to saturation of medical services at all levels which calls for action and close attention especially in patients with respiratory diseases

162. Impact of COVID-19 on access to healthcare in low- and middle-income countries: Current evidence and future recommendations

By: Okereke, Melody; Ukor, Nelson Ashinedu; Adebisi, Yusuff Adebayo; Ogunkola, Isaac Olushola; Iyagbaye, Eseosa Favour; Owzor, Greatman Adiola; Lucero-Prisno, Don Eliseo, III

Countries of focus: Africa

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Inadequate skilled health care personnel, poorly maintained facilities and infrastructural frameworks and inadequate availability of PPEs are increasing the vulnerability of populations in Low income countries to COVID-19

Quoted statement: The impact of the COVID-19 pandemic is far-reaching on many areas including but not limited to global health security, economic and healthcare delivery with a potential impact on access to healthcare in LMICs.

163. Universal Basic Income as a Policy Response to COVID-19 and Precarious Employment:

Potential Impacts on Rehabilitation and Return-to-Work

By: Stahl, Christian; MacEachen, Ellen

Countries of focus: Review

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Universal basic income offers financial stability to individuals who have lost income following COVID-19 disruptions. It also serves as safety net for those who do not qualify for other benefits due to weak employment status

Quoted statement: The COVID-19 pandemic has led to the idea of UBI taking root in the imagination of some policy-makers, although the effects of a permanent UBI remain to be understood, especially in relation to translating it into practice for work disability in comprehensive and cause-based systems.

164. Healthcare Concerns of Older Adults during the COVID-19 Outbreak in Low- and Middle-Income Countries: Lessons for Health Policy and Social Work

By: Arthur-Holmes, Francis; Akaadom, Michael Kwesi Asare; Agyemang-Duah, Williams; Abrefa Busia, Kwaku; Peprah, Prince

Countries of focus: Ghana

Type of analysis: Review

Impact type: Negative

Impact pathways: The diversion of health services towards emergency response to COVID-19 pandemic is exacerbating the already limited access to health care making it difficult for the elderly to receive care.

Quoted statement: Older people have been identified to be one of the most vulnerable population groups to COVID-19. At the same time, more health workers in low-and middle-income countries (LMICs) are contracting COVID-19. This poses healthcare utilization concerns for older adults. As a result, many older adults are changing their health-seeking behavior by staying at home and resorting to informal healthcare such as the use of traditional therapies and over-the-counter medicines for self-treatment or to boost their immune system.

165. Is it time to consider an income guarantee for the period that patients with COVID-19 spend in isolation: an Indian perspective?

By: Singh, S. M.; Mohindra, R.; Shouan, A.

Countries of focus: India

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Lockdown has been associated with increasing economic stress especially for the poor and marginalized sections of the society because of the near stoppage of economic activity.

Quoted statement: At present, the policy of the Government of India with regards to COVID-19 has been to admit patients in specially created isolation facilities until they test negative or recently to be confined to home-based isolation if asymptomatic or mildly symptomatic. This is done to break the chain of transmission and prevent further infections in the community

166. COVID-19 pandemic: Preparation of the department of anesthesiology and pain medicine in a tertiary care hospital of a low-income country

By: Khan, Sana'a Afzal; Ahmed, Wajahat Nazir; Chatha, Muhammad Hasnain; Khan, Asma Ashraf; Khan, Ahsun Waqar

Countries of focus: Pakistan

Type of analysis: Review

Impact type: Positive

Impact pathways: Creation of a comprehensive plan for the department of anesthesia and pain medicine will improve the ability to deal with the ongoing pandemic

Quoted statement: The COVID-19 pandemic has a global health crisis with great challenges to even the most advanced healthcare systems around the world. Pakistan has a poorly developed healthcare infrastructure to effectively cope with the pandemic

167. Medicine is a social science: COVID-19 and the tragedy of residential care facilities in high-income countries

By: Krones, Tanja; Meyer, Gabriele; Monteverde, Settimio

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: insufficient access to PPEs and limited staff training in infection control and prevention has increased the risk of vulnerability

Quoted statement: COVID-19 both unveiled and exacerbated existing inequalities and injustices within a country, making different populations particularly vulnerable to COVID-19, among them people living in poverty, without shelter, without regular residence, without employment or people living in residential care facilities.

168. Factors Associated with Mental Health Results among Workers with Income Losses Exposed to COVID-19 in China

By: Li, Xin; Lu, Peixin; Hu, Lianting; Huang, Tianhui; Lu, Long

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Social distancing, isolations and lockdowns lead to reduced physical movement and social interaction which has led to developments of mental health disorders such as anxiety, stress and depression which is highly affecting the marginalized population

Quoted statement: With the rapid spread of COVID-19, the local government in Wuhan immediately adopted a city closure policy, encouraging citizens to work at home and teach online, and shut down non-essential services to mitigate the impact and risks of the disease.

169. COVID-19 and global health: Influences and implications for education and training support in low- and middle-income countries

By: Cooper, Michael G.; Karu, Arvin W.; Bowden, Christopher D

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Living, working and travelling in close proximity, lack of testing due to limited availability of appropriate resources and understaffed health facilities exacerbate the risk of infections

Quoted statement: The past 6 months of the COVID-19 pandemic have changed nearly all aspects of medical care in countries around the world and this includes education and training. This has major foreseeable and unforeseeable implications for medical and healthcare training, especially in low- and middle-income countries (LMICs) already challenged by poorly resourced health systems.

170. An Invited Commentary on: Emergency and essential surgical healthcare services during COVID-19 in low- and middle-income countries: A perspective

By: Griffin, M. F.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Deployment of surgical staff from operating rooms have devastating consequences on maintaining emergency and essential surgical care delivery

Quoted statement: During COVID-19, many healthcare systems have reallocated surgical staff to the emergency frontline and intensive care units (ITUS) to overcome the burden of the pandemic, providing surgical care only for emergency surgery

171. Emerging pharmacy services; Recommendations for emergency care of COVID-19 pandemic in low and middle-income countries

By: Hamid, Husnain; Masood, Rizwan Ali; Khalid, Wahab; Saqlain, Muhammad; Tariq, Hira; Munir, Muhammad Usman

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Pharmacists have a significant contribution in identifying, reporting and managing COVID-19 patients through care services at community level, and through tele-pharmaceutical services

Quoted statement: Low and Middle income-countries lack standard pharmacy services in terms of staff, education, training, pharmaceutical care, research, and practice. Currently, pharmacists have renowned roles as to identify, report, and manage patients through practicing standard procedures at community level, clinical/hospital level, research and development level as well as practicing through online services

172.The Case for a Temporary COVID-19 Income Tax Levy Now, During the Crisis

By: Karnon, Jonathan

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Tax levy will increase the incentive to work thereby increasing economic activities which increases the living standards and government revenues

Quoted statement: the implementation of an income tax levy now, during the crisis, is a positive policy option. The main argument against raising income tax is that it reduces incentives to work, which reduces economic activity, which reduces living standards and government revenues

173.Healthcare facilities in low- and middle-income countries affected by COVID-19: Time to upgrade basic infection control and prevention practices

By: Angrup, Archana; Kanaujia, Rimjhim; Ray, Pallab; Biswal, Manisha

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Poverty, limited access to resources and poor health infrastructure are exacerbating the spread of the virus in low and middle-income countries

Quoted statement: COVID-19 as a pandemic has spanned across all continents. With the increasing numbers in cases worldwide, even the countries with the best of healthcare facilities are reeling under the burden of the disease. Therefore, in countries with limited access to resources and poor healthcare infrastructure, the low and middle-income countries (LMICs), limiting spread becomes even more challenging

174.COVID-19 infection outbreak among health care workers: Perspective from a low-middle income country

By: Dev, Nishanth; Kumar, Vijay; Sankar, Jhuma

Countries of focus: India

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Unpreparedness and lack of proper training, continuous and prolonged working hours, lack of proper hygiene are increasing the rates of vulnerability in health care workers

Quoted statement: Healthcare workers are the backbone of this pandemic and being on the frontline makes them more vulnerable. they suffer from physical and mental exhaustion, agony of losing patients and colleagues and fear of infecting their family and social isolation

175. Protecting essential health services in low-income and middle-income countries and humanitarian settings while responding to the COVID-19 pandemic

By: Blanchet, Karl; Alwan, Ala; Antoine, Caroline; Cros, Marion Jane; Feroz, Ferozuddin; Guracha, Tseguaneh Amsalu; Haaland, Oystein; Hailu, Alemayehu; Hangoma, Peter; et al

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Maximizing the benefits produced by scarce resources and treating people equally can potentially increase access to essential healthcare services

Quoted statement: COVID-19 creates unprecedented disruptions in delivery of routine healthcare. It is crucial to ensure that patients not infected by COVID-19 continue to get access to healthcare and that the services they need continue to be resourced

f) Environment

176. A brief review of socio-economic and environmental impact of Covid-19

By: Bashir, Muhammad Farhan; Ma, Benjiang; Shahzad, Luqman

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: restrictions related to curbing the spread of COVID-19 have enhanced cleaner environmental

Quoted statement: However, restricted economic activities have also contributed towards a cleaner environment.

177. A Critical Reflection on Environmental Education During the COVID-19 Pandemic

By: Bai, Heesoon

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: COVID-19 presents an opportunity to relook at environmental education from a more integrated perspective

Quoted statement: Using the COVID-19 pandemic as a lens through which to examine and expose the modernist western blueprint of EE, this paper suggests another way of reconsidering EE the Zen way of 'becoming one with ten thousand things'.

178. A global analysis on the effect of temperature, socio-economic and environmental factors on the spread and mortality rate of the COVID-19 pandemic

By: Rahman, Mizanur; Islam, Mahmuda; Shimanto, Mehedi Hasan; Ferdous, Jannatul; Rahman, Abdullah Al-Nur Shanto; Sagor, Pabitra Singha; Chowdhury, Tahasina

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: temperature variations have a direct impact to the mortality rates in different economies

Quoted statement: Our analysis suggests that warm climate may reduce the mortality rate in high-income economies, but in low- and middle-income countries, high diurnal temperature variation may increase the mortality risk.

179. A preliminary assessment of the impact of COVID-19 on environment? A case study of China

By: Wang, Qiang; Su, Min

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Enforcing quarantine measures have both public and environmental benefits

Quoted statement: The results in this study support the fact that strict quarantine measures can not only protect the public from COVID-19, but also exert a positive impact on the environment.

180. A rationale and framework for seeking remote electronic or phone consent approval in endovascular stroke trials - special relevance in the COVID-19 environment and beyond

By: Rai, Ansaar T.; Frei, Donald

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: COVID 19 highlights the need to enhance electronic communication while maintaining appropriate adherence to ethical and legal frameworks.

Quoted statement: The current pandemic has presented an opportunity to evaluate and enhance electronic communication tools and update the rules of conducting ethical clinical research in compliance with the code of federal regulations.

181. A Spatio-Temporal Analysis of the Environmental Correlates of COVID-19 Incidence in Spain

By: Paez, Antonio; Lopez, Fernando A.; Menezes, Tatiane; Cavalcanti, Renata; da Rocha Pitta, Maira Galdino

Countries of focus: Spain

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: In Spain, there is no relationship between COVID-19 and temperature

Quoted statement: No evidence of a relationship between COVID-19 cases and temperature was found, however, results should not be extrapolated to other temperature ranges

182. All change. Has COVID-19 transformed the way we need to plan for a healthier and more equitable food environment?

By: Chang, Michael; Green, Liz; Cummins, Steve

Countries of focus: United Kingdom

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID-19 presents an opportunity to relook into the policy framework especially around healthy food

Quoted statement: COVID-19 is having impacts across the different systems, sectors and interventions, and there is a need to better understand the pros and cons in a delicate balancing act across social and economic drivers.

183. An environmental and health perspective for COVID-19 outbreak: Meteorology and air quality influence, sewage epidemiology indicator, hospitals disinfection, drug therapies and recommendations

By: Barcelo, Damia

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: There exists numerous environmental and health problems associated with COVID-19.

Quoted statement: The current Opinion Paper is one of the first attempts, to my understanding, to summarize and integrate environmental and human health aspects related to the monitoring, fate and treatment solutions for COVID-19.

184. An Environmental Data Collection for COVID-19 Pandemic Research

By: Liu, Qian; Liu, Wei; Sha, Dexuan; Kumar, Shubham; Chang, Emily; Arora, Vishakh; Lan, Hai; Li, Yun; Wang, Zifu; Zhang, Yadong; et al

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: The spatiotemporal platform views virus-related environmental data collection (EDC) an important component for the geospatial analysis

Quoted statement: The proposed framework is a growing data collection with content extended according to the needs and requirement of users and the evolution of the pandemic.

Environmental data are processed and organized across multiple spatiotemporal scales for a variety of applications

185. An environmental psychology perspective on the confinement caused by COVID-19 (Un enfoque psicoambiental del confinamiento a causa del COVID-19)

By: Aragones, Juan-Ignacio; Sevillano, Veronica

Countries of focus: United States

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID 19 has had negative impacts on environmental psychology

Quoted statement: This article particularly focuses on studies of risk perception in this type of event; it then examines the relevant factors that occur during confinement, such as privacy, overcrowding, social distance and remote work

186. An Imperative Need for Research on the Role of Environmental Factors in Transmission of Novel Coronavirus (COVID-19)

By: Qu, Guangbo; Li, Xiangdong; Hu, Ligang; Jiang, Guibin

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID 19 poses cross cutting threats that requires integrated approach to address

Quoted statement: It is clear that the threat of COVID-19 outbreak is not limited to any single country or region. The response, control, and prevention of novel infectious diseases require strong and sustainable international collaborative work and data sharing. Further research is imperative to fill the knowledge gaps on COVID-19.

187. Approaches for prevention and environmental management of novel COVID-19

By: Tabish, Mohammad; Khatoon, Aisha; Alkahtani, Saad; Alkahtane, Abdullah; Alghamdi, Jawahir; Ahmed, Syed Anees; Mir, Snober S.; Albasher, Gadah; et al

Countries of focus: China

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID 19 management has potential negative environmental impacts

Quoted statement: Significant hazardous waste management concerns arise due to the need to assure the elimination of residual pathogens in household and medical wastes.

188. Assessing and managing the risks of COVID-19 in the workplace: Applying industrial hygiene (IH)/occupational and environmental health and safety (OEHS) frameworks

By: Zisook, Rachel E.; Monnot, Andrew; Parker, Justine; Gaffney, Shannon; Dotson, Scott; Unice, Kenneth

Countries of focus: United States

Type of analysis: Review

Impact type: Positive

Impact pathways: there is need for more integrated approaches to assess and manage pathogens leading to diseases like COVID-19

Quoted statement: In the future, best practices for assessing and managing the hazards of SARS-CoV-2 and other pathogens in the workplace should take an integrative approach, incorporating the best available scientific data in conjunction with psychosocial and community factors.

189. Assessing Short-Term and Long-Term Economic and Environmental Effects of the COVID-19 Crisis in France

By: Malliet, Paul; Reynes, Frederic; Landa, Gissela; Hamdi-Cherif, Meriem; Saussay, Aurelien

Countries of focus: France

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: positive impacts in terms of carbon emissions reduction; but negative impacts in terms of reduced economic outputs

Quoted statement: We find that the lockdown has led to a significant decrease in economic output of 5% of GDP, but a positive environmental impact with a 6.6% reduction in CO₂ emissions in 2020.

190. Assessing the changing urban sound environment during the COVID-19 lockdown period using short-term acoustic measurements

By: Aletta, Francesco; Oberman, Tin; Mitchell, Andrew; Tong, Huan; Kang, Jian

Countries of focus: London

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: COVID -19 has positively resulted to decreased noise

Quoted statement: Among the environmental impacts is a decrease in urban noise levels which has so far been observed at the city scale via noise mapping efforts conducted through the framework of the Environmental Noise Directive.

191. Assessment of COVID-19 Waste Flows During the Emergency State in Romania and Related Public Health and Environmental Concerns

By: Mihai, Florin-Constantin

Countries of focus: Romania

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: COVID 19 waste flows monitoring is essential in reducing environmental contamination

Quoted statement: Monitoring of COVID-19 waste flow through such models are important for decision-makers, particularly in low and middle-income countries which are facing waste management deficiencies and gaps in waste statistics, to reduce other contamination risks or related environmental threats

192.Association of COVID-19 global distribution and environmental and demographic factors: An updated three-month study

By: Sarmadi, Mohammad; Marufi, Nilufar; Moghaddam, Vahid Kazemi

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: air pollution is linked to transmission of COVID 19 in different cities

Quoted statement: A substantial relationship has also been found between urban air pollution and the transmission dynamics of COVID-19; air pollutants emitted from vehicles and industries, such as nitrogen oxide and particle matter, may affect viral infection emission and increase the number

193.Association of Environmental Parameters with COVID-19 in Delhi, India

By: Ladha, Nikhilesh; Bhardwaj, Pankaj; Charan, Jaykaran; Mitra, Prasenjit; Goyal, Jagdish Prasad; Sharma, Praveen; Singh, Kuldeep; Misra, Sanjeev

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Temperature and humidity have no significant association with COVID 19 cases

Quoted statement: We did not find a significant association of temperature and humidity with COVID-19 cases after regression.

194.Asymptomatic COVID-19 Patients Can Contaminate Their Surroundings: an Environment Sampling Study

By: Wei, Li; Lin, Ji; Duan, Xiaofei; Huang, Wenzhi; Lu, Xiaojun; Zhou, Juan; Zong, Zhiyong

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: COVID 19 patients contaminates their immediate surroundings, thus the need for regular environmental cleaning

Quoted statement: In particular, we found that asymptomatic COVID-19 patients contaminated their surroundings and therefore imposed risks for other people. Environment cleaning should be emphasized in negative-pressure rooms.

195.Behavioural, environmental, social, and systems interventions against covid-19 These critical interventions should be top not bottom of the covid-19 research agenda

By: Michie, Susan; West, Robert

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: addressing COVID 19 and other pandemics in future will need more concerted and integrated efforts from different stakeholders

Quoted statement: we urgently need a major coordinated programme of research to develop and evaluate behavioural, environmental, social, and systems interventions that will be effective and viable in tackling the covid-19 and future pandemics.

196. Building COVID-19-Safe Environments

By: [Anonymous]

Countries of focus: United States

Type of analysis: Review

Impact type: Positive

Impact pathways: safe environments can reduce the spread of pandemics like COVID 19

Quoted statement: Among the simplest suggestions for healthier buildings: opening windows to improve air circulation and opening blinds to admit natural daylight.

197. Changes in Sustainability Priorities in Organisations due to the COVID-19 Outbreak:

Averting Environmental Rebound Effects on Society

By: Barreiro-Gen, Maria; Lozano, Rodrigo; Zafar, Afnan

Countries of focus: Global

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: positive - COVID 19 has positively contributed to improved air condition and reduced pollution Negatively - these issues are slowly being neglected by organisations

Quoted statement: We are currently facing an environmental conundrum, where air quality has improved and pollution has decreased in societies, but organisations are starting to neglect such environmental issues.

198. Coronavirus pandemic (COVID-19) and its natural environmental impacts

By: Rupani, P. F.; Nilashi, M.; Abumalloh, R. A.; Asadi, S.; Samad, S.; Wang, S.

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: positive - reduced carbon emission, improved water pollution, better air quality; negatively - negative social and economic

Quoted statement: The COVID-19 lockdown has several social and economic effects.

Additionally, COVID-19 has caused several impacts on global migration. On the other hand, such lockdown, along with minimal human mobility, has impacted the natural environment somewhat positively. Overall carbon emissions have dropped, and the COVID-19 lockdown has led to an improvement in air quality and a reduction in water pollution in many cities around the globe.

199. Correlation between environmental pollution indicators and COVID-19 pandemic: A brief study in Californian context

By: Bashir, Muhammad Farhan; Ma, Ben Jiang; Bilal; Komal, Bushra; Bashir, Muhammad Adnan; Farooq, Taimoor Hassan; Iqbal, Najaf; Bashir, Madiha

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Environmental pollutants have a significant correlation with the COVID-19 epidemic in California.

Quoted statement: Our findings indicate that environmental pollutants such as PM10, PM2.5, SO2, NO2, and CO have a significant correlation with the COVID-19 epidemic in California.

200. Coupled human-environment system amid COVID-19 crisis: A conceptual model to understand the nexus

By: Sarkar, Priyanka; Debnath, Nirmal; Reang, Demsai

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: development of conceptual models can assess different sub-components related to the impacts of COVID 19

Quoted statement: Future studies may focus on forecasting the long-term impacts of the current crisis through developing scenarios considering the different components of the CHES identified in the present study.

201. COVID-19 and the environment: A critical review and research agenda

By: Shakil, Mohammad Hassan; Munim, Ziaul Haque; Tasnia, Mashiyat; Sarowar, Shahin

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: lockdowns during COVID 19 pandemic have improved environmental quality

Quoted statement: we conclude that the COVID-19 pandemic has led to improved environmental quality.

202. COVID-19 Could Leverage a Sustainable Built Environment

By: Pinheiro, Manuel Duarte; Luis, Nuno Cardoso

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Built environment can support public health measures and reduce the risk of infections.

Quoted statement: The review of potential COVID-19 measures shows the existence of well-referenced solutions, ranging from incremental alterations (organization of spaces, erection of physical barriers) to structural alterations (windows, balconies) with different timeframes and scales (ranging from changes in building materials to the design of urban areas).

203. COVID-19 environmental transmission and preventive public health measures

By: Vardoulakis, Sotiris; Sheel, Meru; Lal, Aparna; Gray, Darren

Countries of focus: Australia

Type of analysis: Review

Impact type: Positive

Impact pathways: Lockdown reduced COVID 19 transmission and positively impacted on environment

Quoted statement: Strict lockdowns prevented widespread community transmission, albeit at very high economic cost; Greenhouse gas emissions declined, and ambient air and potentially surface water quality improved in many cities, mainly because of reduced road traffic and industrial activity

204. Covid-19 face masks: A potential source of microplastic fibers in the environment

By: Fadare, Oluniyi O.; Okoffo, Elvis D.

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID 19 is causing unprecedented rise in the global production of face masks present a new environmental challenge

Quoted statement: Covid-19 is playing a key role in microplastic pollution

205. COVID-19 from mysterious enemy to an environmental detection process: a critical review

By: El-Baz, Lamis M. F.; Elwakeel, Khalid Z.; Elgarahy, Ahmed M.

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID 19 has a direct impact on different sub-components of the environment

Quoted statement: The knowledge about the nature and evolution of the COVID-19 virus in water, soils, and other environmental compartments can be addressed through wastewater and sewage.

206. COVID-19 in Human, Animal, and Environment: A Review

By: Swelum, Ayman A.; Shafi, Manal E.; Albaqami, Najah M.; El-Saadony, Mohamed T.; Elsify, Ahmed; Abdo, Mohamed; Taha, Ayman E.; et al

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: corona virus has multiple cross-cutting impacts in human, Animal, and Environment

Quoted statement: Coronaviruses cause multiple respiratory problems, varying from common cold to severe infections such as SARS

207. COVID-19 lockdown: animal life, ecosystem and atmospheric environment

By: Bar, Harekrishna

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: lockdowns in major cities and countries globally had positive impacts to animal life, ecosystem and atmospheric environment

Quoted statement: the levels of NO₂ and carbon emission remarkably decrease in atmosphere; improvement in air qualities; Noise pollution remarkably dropped; The behavioural changes of wild animals, birds, butterfly, pets and street animals that reflected on ecosystem of their relative region

208.COVID-19 outbreak: Migration, effects on society, global environment and prevention

By: Chakraborty, Indranil; Maity, Prasenjit

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID 19 has numerous and cross cutting effects to the society and environment

Quoted statement: It has rapidly spread around the world, posing enormous health, economic, environmental and social challenges to the entire human population.

209.COVID-19 pandemic and environmental pollution: A blessing in disguise?

By: Muhammad, Sulaman; Long, Xingle; Salman, Muhammad

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: pollution has reduced significantly due to lock downs in different locations globally

Quoted statement: pollution in some of the epicenters of COVID-19 such as Wuhan, Italy, Spain and USA etc. has reduced up to 30%.

210.COVID-19 pandemic and its positive impacts on environment: an updated review

By: Khan, I.; Shah, D.; Shah, S. S.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Countries where the movement of citizens was seized to stop the spread of coronavirus infection have experienced a noticeable decline in pollution and greenhouse gases emission.

Quoted statement: Countries where the movement of citizens was seized to stop the spread of coronavirus infection have experienced a noticeable decline in pollution and greenhouse gases emission.

211.COVID-19 pandemic persuaded lockdown effects on environment over stone and crushing areas

By: Mandal, Indrajit; Pal, Swades

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: positive-environmental restoration; negative-economic crises

Quoted statement: Imposing emergency lockdown to stop infection of COVID 19 virus on 24.03.2020 in India has created economic crisis but it has facilitated environment to restore its quality

212.COVID-19 pandemic: An outlook on its impact on air quality and its association with environmental variables in major cities of Punjab and Chandigarh, India

By: Sahoo, Prafulla Kumar; Chauhan, Amit Kumar; Mangla, Sherry; Pathak, Ashok Kumar; Garg, V. K.

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: there is tremendous improvement of air quality in India due to lockdown

Quoted statement: COVID-19 lockdown has drastically improved the quality of air in major cities of Punjab and Chandigarh

213.COVID-19 pandemic: environmental and social factors influencing the spread of SARS-CoV-2 in Sao Paulo, Brazil

By: Nakada, Liane Yuri Kondo; Urban, Rodrigo Custodio

Countries of focus: Brazil

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: COVID 19 spread is associated with high density and inversely with UV radiation and temperature

Quoted statement: As for social aspects, COVID-19 infection rate was found to be both positively correlated with population density, and negatively correlated with social isolation rate, hence indicating that social distancing has been effective in reducing the COVID-19 transmission; and inversely correlated with both temperature and UV radiation

214.COVID-19 pandemic: lockdown impacts on the Indian environment, agriculture and aquaculture

By: Mohanty, Rajeeb K.; Mandal, Krishna G.; Thakur, Amod K.

Countries of focus: India

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: lockdown in India has achieved environmental benefits such as reduced air pollution, reduced carbon emissions, and improved water quality

Quoted statement: Lockdown in India helped in reducing air pollution levels of major industrial cities (60-70%), due to significant improvement in the air quality index. This has also contributed in reducing global carbon emissions and greenhouse gas emissions There has been a 40-50% improvement in the riverine water quality in terms of dissolved oxygen, biological oxygen demand, coliform bacteria levels and suspended particulate matter

215.COVID-19 pandemic! It's impact on people, economy, and environment

By: Debata, Byomakesh; Patnaik, Pooja; Mishra, Abhisek

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: positive-less pollution and environmental revival; negative form social and economic lenses

Quoted statement: lockdown has become a boon for the environment to revive due to less pollution and reduced discharge of effluents to water from factories; lockdown has increased cases of domestic violence and child abuse, and a significant revenue loss.

216.COVID-19 Place Confinement, Pro-Social, Pro-environmental Behaviors, and Residents' Wellbeing: A New Conceptual Framework

By: Ramkissoon, Haywantee

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: lockdown is beneficial both socially and environmentally

Quoted statement: this paper develops and proposes a conceptual framework suggesting that place confinement promotes pro-social and household pro-environmental behaviors which could become habitual and contribute further to our people's and our planet's health

217. Covid-19, Environmental Engineering and the End of the World as We Know it

By: Pawlowski, Artur

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: amidst COVID 19, the role of engineering and science remains crucial for survival of humanity

Quoted statement: When all humanity is worried about their health, is there still any room for technical sciences and environmental engineering? In this work, It will be proved, that the answer is yes

218. COVID-19: A relationship to climate and environmental conditions?

By: Kroumpouzou, George; Gupta, Mrinal; Jafferany, Mohammad; Lotti, Torello; Sadoughifar, Roxanna; Sitkowska, Zuzanna; Goldust, Mohamad

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: temperature and humidity influence the spread of COVID 19

Quoted statement: Environmental factors such as temperature and humidity play an important role in progression and spread of severe acute respiratory syndrome (SARS)-CoV infection with the virus retaining its viability for over 5 days at temperatures of 22°C to 25°C and relative humidity (RH) of 40% to 50%.

219. COVID-19: Environment concern and impact of Indian medicinal system

By: Kumar, Vijay; Singh, Shyam Babu; Singh, Simranjeet

Countries of focus: India

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Disposal of COVID 19 medicine may negatively affect the environment

Quoted statement: Improper disposal of medical/biomedical and human waste may harm the total environment

220. Covid-19: environmental health officers and retired doctors step up to fill contact tracing void

By: Mahase, Elisabeth

Countries of focus: United Kingdom

Type of analysis: Review

Impact type: Positive

Impact pathways: contact tracing is positively contributing to curbing COVID 19 spread

Quoted statement: Hundreds of environmental health professionals have offered their time and expertise to help with contact tracing in England, Wales, and Northern Ireland, in the hope of getting the covid-19 outbreak in the UK under control.

221.COVID-19: Healthy environmental impact for public safety and menaces oil market

By: Tahir, Muhammad Bilal; Batool, Amber

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID 19 likely to cause financial crises

Quoted statement: Financial crises and reduction in oil prices will lead towards another world order due to COVID-19.

222.COVID-19: How to Reduce Some Environmental and Social Impacts?

By: Voirol, Christian; Sader, Julia; Audetat, Marie-Claude

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: COVID 19 management has resulted to negative social and environmental impacts

Quoted statement: Indeed, the COVID-19 prevention strategies implemented in the population are based on medical paradigms that generate extremely deleterious social and environmental impacts.

223.COVID-19: impact by and on the environment, health and economy

By: Gautam, Sneha; Hens, Luc

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID 19 management strategies have adverse effects to the social and economic environment

Quoted statement: On the other hand, the entire world population currently faces enormous challenges (i.e., social, environmental, health, and economic) due to impact of COVID-19

224.COVID-19: socio-environmental challenges of Rohingya refugees in Bangladesh

By: Shammi, Mashura; Robi, Mushfiqur Rahman; Tareq, Shafi M.

Countries of focus: Bangladesh

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: numerous challenges cutting across social, economic and environment as a result of COVID 19 are cited in the study

Quoted statement: The refugees are living in highly challenging circumstances of water, sanitation, and hygiene (WASH), natural disasters of the monsoon season as well as existing health and educational challenges of HIV, malnutrition and other diseases.

225.COVID-19's impact on the atmospheric environment in the Southeast Asia region

By: Kanniah, Kasturi Devi; Zaman, Nurul Amalin Fatihah Kamarul; Kaskaoutis, Dimitris G.; Latif, Mohd Talib

Countries of focus: southeast Asian (SEA)

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: lockdowns in SEA have reduced air pollution and consequently improved on health

Quoted statement: Notable reductions are also seen at industrial, suburban and rural sites across the country. Quantifying the reductions in major and health harmful air pollutants is crucial for health-related research and for air-quality and climate-change studies.

226.COVID-19's toll on environmental monitoring

By: Bourzac, Katherine

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Travel restrictions for monitoring environmental changes

Quoted statement:

227.Critical review of social, environmental and health risk factors in the Mexican indigenous population and their capacity to respond to the COVID-19

By: Diaz de Leon-Martinez, Lorena; de la Sierra-de la Vega, Luz; Palacios-Ramirez, Andres; Rodriguez-Aguilar, Maribel; Flores-Ramirez, Rogelio

Countries of focus: Mexico

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: cross cutting social, environmental and health impacts of COVID 19 in Mexico are discussed

Quoted statement: Indigenous populations are more vulnerable to COVID-19 due to social, environmental and health factors.

228.Ecological grief generates desire for environmental healing in tourism after COVID-19

By: Crossley, Emilie

Countries of focus: Italy

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: COVID 19 has played a crucial role in wildlife regeneration in urban spaces promoting tourism and associated economic benefits

Quoted statement: In this context, animal reclamation of urban spaces can be identified as a motif of environmental hope that symbolises life, regeneration and resilience, the understanding of which may contribute to the project of hopeful tourism in the post-COVID-19 era.

229.Effect of COVID-19 outbreak on urban health and environment

By: Girdhar, Ashish; Kapur, Himani; Kumar, Vijay; Kaur, Manjit; Singh, Dilbag; Damasevicius, Robertas

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: reduced economic activities have reduced pollution and improved air quality

Quoted statement: Reduction in economic activities has resulted in improved air quality across the world

230. Effects of Covid-19 outbreak on environment and renewable energy sector

By: Eroglu, Hasan

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID 19 has negatively impacted on the renewable energy sector

Quoted statement: The outbreak caused very serious problems in the renewable energy sector, such as delays in the supply chain, difficulties in tax stock markets and the risk of not being able to benefit from government incentives ending this year.

231. Effects of Physical Distancing to Control COVID-19 on Public Health, the Economy, and the Environment

By: Newbold, Stephen C.; Finnoff, David; Thunstrom, Linda; Ashworth, Madison; Shogren, Jason F.

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Physical distancing to curb the spread of COVID 19 has medical, social and economic impacts

Quoted statement: Physical distancing measures are important tools to control disease spread, especially in the absence of treatments and vaccines. While distancing measures can safeguard public health, they also can profoundly impact the economy and may have important indirect effects on the environment.

232. Elements of Sustainable Development in the Context of the Environmental and Financial Crisis and the COVID-19 Pandemic

By: Kapecki, Tomasz

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID 19 remains a major threat to equitable sustainable development

Quoted statement: Successive global crises, especially the ecological, economic, financial and now humanitarian one related to the COVID-19 pandemic have demolished global economies, sidelined the development of a sustainable economy and especially sustainable construction, treating it more as a whim of the rich than expedience

233. Energy Demand in the State of Kuwait During the Covid-19 Pandemic: Technical, Economic, and Environmental Perspectives

By: Alhajeri, Hamad M.; Almutairi, Abdulrahman; Alenezi, Abdulrahman; Alshammari, Faisal

Countries of focus: Kuwait

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID 19 has led to reduction in power generation.

Quoted statement: COVID-19 led to a significant, measured reduction in total power generation compared to the growth estimated for 2020, and to the actual consumption in 2019.

234. Environment and COVID-19: Pollutants, impacts, dissemination, management and recommendations for facing future epidemic threats

By: Espejo, Winfred; Celis, Jose E.; Chiang, Gustavo; Bahamonde, Paulina

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: COVID 19 has led to positive environmental and health impacts

Quoted statement: Environmental management through ecosystem services has a relevant role in exposing and spreading infectious diseases, reduction of pollutants, and control of climatic factors.

235.Environmental and nutritional impacts of dietary changes in Spain during the COVID-19 lockdown

By: Batlle-Bayer, Laura; Aldaco, Ruben; Bala, Alba; Puig, Rita; Laso, Jara; Margallo, Maria; Vazquez-Rowe, Ian; Anto, Josep Maria; Fullana-I-Palmer, Pere

Countries of focus: Spain

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID 19 has increased energy intakes thus impacting on the environment

Quoted statement: COVID diet had larger energy intake and lower nutritional quality, as well as higher environmental impacts (between 30 and 36%) than the pre-COVID eating patterns.

236.Environmental and Regulatory Concerns During the COVID-19 Pandemic: Results from the Pandemic Food and Stigma Survey

By: Kecinski, Maik; Messer, Kent D.; McFadden, Brandon R.; Malone, Trey

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Flexing of COVID 19 regulations is dependent on factors such as food security

Quoted statement: In general, we find that people whose food security has been threatened by COVID-19 remain concerned about relaxation of environmental regulations, and those most inclined to take steps to reduce spread of the virus, such as wearing masks and social distancing, are more concerned about relaxed regulations than those less willing to take mitigating actions.

237.Environmental Catastrophe of COVID-19: Disposal and Management of PPE in Bangladesh

By: Shammi, Mashura; Tareq, Shafi M.

Countries of focus: Bangladesh

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: PPE use during the COVID 19 pandemic has the potential to create and environmental crises

Quoted statement: As COVID-19 spreads quickly across the whole of Bangladesh, the increased uses of Personal Protective Equipment (PPE) could lead to secondary environmental catastrophes.

238.Environmental contamination of SARS-CoV-2 during the COVID-19 outbreak in South Korea

By: Ryu, Byung-Han; Cho, Younghwa; Cho, Oh-Hyun; Hong, Sun In; Kim, Sunjoo; Lee, Seungjun

Countries of focus: South Korea

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: hospital environment is a likely area of COVID 19 transmission through infected surfaces

Quoted statement: Hospital surfaces surrounding patients were contaminated by SARS-CoV-2. Our findings support the value of strict contact precaution, routine cleaning and disinfection in the management of COVID-19 patients.

239.Environmental effects of COVID-19 pandemic and potential strategies of sustainability

By: Rume, Tanjena; Didar-Ul Islam, S. M.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: positive - improved air quality through reduced emissions; negative - increased medical wastes such as PPEs

Quoted statement: The pandemic situation significantly improves air quality in different cities across the world, reduces GHGs emission, lessens water pollution and noise, and reduces the pressure on the tourist destinations. In addition, there are also some negative consequences of COVID-19, such as increase of medical waste, haphazard use and disposal of disinfectants, mask, and gloves; and burden of untreated wastes continuously endangering the environment.

240.Environmental Health Leadership on Climate Solutions Amidst COVID-19

By: Perkowitz, Robert M.; Speiser, Meighen; Rehr, Rebecca C.; DeJarnett, Natasha

Countries of focus: United States

Type of analysis: Review

Impact type: Positive

Impact pathways: great lessons on climate health emergency and role of environmental health professionals is emerging from this pandemic

Quoted statement: the COVID-19 crisis provides useful guidance for addressing our climate health emergency.

241.Environmental impact of coronavirus (COVID-19) from Turkish perspective

By: Aydin, Serdar; Nakiyingi, Betina Assumpta; Esmen, Cengiz; Guneyusu, Sinan; Ejjada, Meena

Countries of focus: Turkey

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: COVID 19 management has the potential to improve air quality

Quoted statement: This study gives confidence to regulators that when strict measures are implemented, air quality can improve.

242.Environmental Impacts and Policy Responses to Covid-19: A View from Latin America

By: Lopez-Feldman, Alejandro; Chavez, Carlos; Alejandra Velez, Maria; Bejarano, Hernan; Chimeli, Ariaster B.; Feres, Jose; Robalino, Juan; Salcedo, Rodrigo; Viteri, Cesar

Countries of focus: Latin America

Type of analysis: Review

Impact type: Both

Impact pathways: positive - reduced urban air pollution; negative - increased deforestation

Quoted statement: The pandemic and lockdown measures seem to be having an initial and temporal positive effect on reducing urban pollution in many Latin American cities; At the

same time, the observed increase in deforestation reopens political and academic debates about the role of national parks, indigenous reserves and other protection categories

243.Environmental Issues and Neurological Manifestations Associated with COVID-19 Pandemic:

New Aspects of the Disease?

By: Bellocchio, Luigi; Bordea, Ioana Roxana; Ballini, Andrea; Lorusso, Felice; Hazballa, Denisa; Isacco, Ciro Gargiulo; Malcangi, Giuseppina; Inchingolo, Alessio Danilo; et al

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: COVID 19 results to both ecosystems imbalance and air pollution which also have Neurological Manifestations to the patients

Quoted statement: Current evidence seems to suggest a possible link between COVID 19, ecosystem disequilibrium and even air pollution.

244.Environmental knowledge, risk prevention, renaissance suggestions in the time of COVID-19

By: Farabollini, Piero; Luger, Francesca Romana; Fuffa, Emy

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: environmental conditions are determinant on the spread and management of COVID 19

Quoted statement: Environmental impact of industries and infrastructures, air, water, and agricultural products' quality, as well as eating habits, influence both the social health conditions and the social exposition to the contagion.

245.Environmental maintenance with effective and useful zoning to protect patients and medical staff from COVID-19 infection

By: Ogawa, Fumihito; Kato, Hideaki; Sakai, Kazuya; Nakamura, Kana; Ogawa, Mizuki; Uchiyama, Munehito; Nakajima, Kento; Ohyama, Yutaro; Abe, Takeru; Takeuchi, Ichiro

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: effective use of PPE has reduced significantly the spread of COVID 19 especially among the medics

Quoted statement: There were no evidence of COVID-19 infection in all medical staffs and patients during the period thanks to effective and useful zoning with PPE.

246.Environmental perspective of COVID-19

By: Saadat, Saeida; Rawtani, Deepak; Hussain, Chaudhery Mustansar

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: There is significant improvement in air and water quality due to lockdowns related to COVID 19

Quoted statement: However, the lock down of the COVID-19 pandemic caused the air quality in many cities across the globe to improve and drop in water pollutions in some parts of the world.

247.Environmental pollution and COVID-19 outbreak: insights from Germany

By: Bilal; Bashir, Muhammad Farhan; Benghoul, Maroua; Numan, Umar; Shakoor, Awais; Komal, Bushra; Bashir, Muhammad Adnan; Bashir, Madiha; Tan, Duoqiao

Countries of focus: Germany

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Environmental legislations and medicare care systems positively influences COVID 19 curbing

Quoted statement: Germany's successful response to COVID-19 is attributed to environmental legislation and the medical care system, which oversaw significant overhaul after the SARS and MERS outbreaks.

248.Environmental Sampling for Severe Acute Respiratory Syndrome Coronavirus 2 During a COVID-19 Outbreak on the Diamond Princess Cruise Ship

By: Yamagishi, Takuya; Ohnishi, Makoto; Matsunaga, Nobuaki; Kakimoto, Kensaku; Kamiya, Hajime; Okamoto, Kiyoko; Suzuki, Motoi; Gu, Yoshiaki; Sakaguchi, Mikiyo; Tajima, Taichi; Takaya, Saho; et al

Countries of focus: Japan

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: The virus can be contracted from contaminated surfaces that both symptomatic and asymptomatic people have come into contact with

Quoted statement: Environmental surfaces may have played a role in transmission of the virus. SARS-CoV-2 RNA was detected on multiple surfaces of case cabins, most often on bed pillows and the floor around the toilet in the bathroom

249.Environmental side effects of the injudicious use of antimicrobials in the era of COVID-19

By: Usman, Muhammad; Farooq, Muhammad; Hanna, Khalil

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Excessive use of therapeutic and non-therapeutic antimicrobials may affect the environment through spread of antimicrobial resistance into the environment

Quoted statement: It is well recognized that excessive use of antimicrobials in medicine and agriculture drives antimicrobial resistance which is a global threat to human, animal and environmental health.

250.Environmental virus surveillance in the isolation ward of COVID-19

By: Wang, H.; Mo, P.; Li, G.; Chen, P.; Liu, J.; Wang, H.; Wang, F.; Zhang, Y.; Zhao, Q.

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Use of protective personal equipment before entering the containment zone, disinfection of walls, surfaces and ground of the isolation centers, air disinfection using air sterilizer and ventilation twice a day for 30 minutes

Quoted statement: Findings indicated that daily disinfection should be strengthened in the clean area of isolation ward. Moreover, it is equally important to keep the hands sanitized by using hand sanitizers to avoid apparent and occult SARS-CoV-2 infections among the medical staff

251. Fluctuations in environmental pollutants and air quality during the lockdown in the USA and China: two sides of COVID-19 pandemic

By: Shakoor, Awais; Chen, Xiaoyong; Farooq, Taimoor Hassan; Shahzad, Umer; Ashraf, Fatima; Rehman, Abdul; Sahar, Najam E.; Yan, Wende

Countries of focus: United States and China

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: The restriction of human activities during the lockdown period significantly reduced the concentrations of environmental pollutants in both countries

Quoted statement: COVID-19 cases and deaths are significantly correlated with environmental pollutants in both the USA and China.

252. Food Insecurity, the Home Food Environment, and Parent Feeding Practices in the Era of COVID-19

By: Adams, Elizabeth L.; Caccavale, Laura J.; Smith, Danyel; Bean, Melanie K.

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: The lockdown resulted to loss of income due to loss of job which caused food insecurity in many homes, increased intake of high calorie food and snacks leading to obesity

Quoted statement: The social and economic impacts of COVID-19 will likely result in changes in the home food environment and parent feeding practices that may contribute to possible rising obesity rates.

253. Global assessment of environment, health and economic impact of the novel coronavirus (COVID-19)

By: Sarkodie, Samuel Asumadu; Owusu, Phebe Asantewaa

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Decline in pollution as a result of the lockdown, Health complications and loss of lives as a result of the virus infection, Lockdown had demobilized the economy

Quoted statement: During this period of the global pandemic, several measures have been put in place to contain the spread of COVID-19. These containment measures put in place to reduce health outcomes of the global pandemic have affected environmental sustainability and economic development.

254. How is COVID-19 affecting environmental pollution in US cities? Evidence from asymmetric Fourier causality test

By: Pata, Ugur Korkut

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: The slowdown in economic activities led to a reduction in environmental pollution.

Quoted statement: The pandemic reduces environmental pressure in the largest cities of the USA. This implies that one of the rare positive effects of the virus is to reduce air pollution. Therefore, for a better environment, US citizens should review the impact of current production and consumption activities on anthropogenic environmental problems.

255. Impact of COVID-19 Induced Lockdown on Environmental Quality in Four Indian Megacities Using Landsat 8 OLI and TIRS-Derived Data and Mamdani Fuzzy Logic Modelling Approach

By: Ghosh, Sasanka; Das, Arijit; Hembram, Tusar Kanti; Saha, Sunil; Pradhan, Biswajeet; Alamri, Abdullah M.

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Reduction of particulate matter leading to reduced air pollution, positive changes in patterns of biophysical changes, improvement of environmental quality

Quoted statement: This COVID-19 has spread its arms to 200 countries globally and the megacities of the world were particularly affected with a large number of infections and deaths, which is still increasing day by day. On the other hand, the outbreak has greatly impacted the global environment to regain its health.

256. Impact of COVID-19 large scale restriction on environment and economy in Indonesia

By: Caraka, R. E.; Lee, Y.; Kurniawan, R.; Herliansyah, R.; Kaban, P. A.; Nasution, B., I; Gio, P. U.; Chen, R. C.; Toharudin, T.; Pardamean, B.

Countries of focus: Indonesia

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Economic impacts as a result of disrupted supply chains and production processes, significant reductions in air pollution

Quoted statement: There are significant differences of retail, grocery and pharmacy, and residential mobility before and during the COVID-19 pandemic in Indonesia.

257. Impact of COVID-19 lockdown in Tamil Nadu: Benefits and challenges on environment perspective

By: Chitra, J.; Rajendran, S. M.; Mercy, Jeba J.; Jeyakanthan, J.

Countries of focus: India

Type of analysis: Review

Impact type: Both

Impact pathways: Poor access to health care facilities, unemployment psychological effects, mitigation of air pollution leading to clean air and water quality

Quoted statement: Apart from sufferings of entire country especially the people by social, economic and psychologic effects in day-to-day life, this lockdown has given to the nature the most optimistic scenarios in environment especially with enhanced air quality, cleaner water and undisturbed pristine forest.

258. Impact of novel coronavirus (COVID-19) on daily routines and air environment: evidence from Turkey

By: Ali, Hussain; Yilmaz, Gozde; Fareed, Zeeshan; Shahzad, Farrukh; Ahmad, Munir

Countries of focus: Turkey

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Lockdown has led to unemployment, low inflow of foreign investment and a decrease in exports and GDP growth, it has also resulted in mitigation of air pollution

Quoted statement: COVID-19 influences the daily routines of the industrial workers because compact units are closed, large organizations cannot use their full capacity, and tourism and restaurant sectors are severely affected.

259. Indirect effects of COVID-19 on the environment

By: Zambrano-Monserrate, Manuel A.; Alejandra Ruano, Maria; Sanchez-Alcalde, Luis

Countries of focus: China

Type of analysis: Review

Impact type: Both

Impact pathways: Spread of the virus through untreated wastewater, decrease in air pollution, increased rates of clean beaches, reduction of environmental noise level, increased waste

Quoted statement: COVID-19 will produce both positive and negative indirect effects on the environment, but the latter will be greater. Decreasing GHG concentrations during a short period is not a sustainable way to clean up our environment. Furthermore, the virus crisis brings other environmental problems that may last longer and maybe more challenging to manage if countries neglect the impact of the epidemic on the environment.

260. Indirect impact of COVID-19 on environment: A brief study in Indian context

By: Lokhandwala, Snehal; Gautam, Pratibha

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Lockdowns have led to improvements in quality rivers, reduced emissions leading to improved air quality,

Quoted statement: COVID-19 has brought a fearful devastating scourge for human being but it has emerged as a blessing for natural environment providing it a "recovery time"

261. Influence of Lifestyle Parameters - Dietary Habit, Chronic Stress and Environmental Factors, Jobs - on the Human Health in Relation to the COVID-19 Pandemic

By: Aydemir, Duygu; Ulusu, Nuriye Nuray

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Rapid industrialization and air pollution have adverse effects on the respiratory system thus increasing the vulnerability of people to coronavirus, poverty causes imbalanced nutrition which impairs the immune system, unemployment causes stress

Quoted statement: The coronavirus disease has become a major public health problem since the beginning of 2020. The elderly population and people with chronic diseases are categorized as the major risk groups because of the weakened immune system compared with healthy individuals.

262. Inter nation social lockdown versus medical care against COVID-19, a mild environmental insight with special reference to India

By: Paital, Biswaranjan; Das, Kabita; Parida, Sarat Kumar

Countries of focus: India

Type of analysis: Review

Impact type: Both

Impact pathways: Social lockdown has proved to lower the rate of infection in countries with high populations and poor hygiene and healthcare systems, countries with good health care systems have failed in controlling the infection due to lack of social distancing

Quoted statement: Infection by coronavirus (CoV-19) has led to emergence of a pandemic called as Coronavirus Disease (COVID-19) that has so far affected about 210 countries. Therefore, countries with the most advanced health care system are partially successful to control CoV-19 infection

263. INVESTIGATING THE ROLE OF ENVIRONMENTAL CONCERN AND THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY ON WORKING FROM HOME TECHNOLOGIES ADOPTION DURING COVID-19

By: Razif, Mohammad; Miraja, Bobby Ardiansyah; Persada, Satria Fadil; Nadlifatin, Reny; Belgiawan, Prawira Fajarindra; Redi, Anak Agung Ngurah Perwira; Lin, Shu-Chiang

Countries of focus: Indonesia

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Working from home technologies create sustainable work activity

Quoted statement: Working from Home (WFH) technologies has been used and discussed for a long time. The many positive benefits of WFH technologies, including its potential to create a more sustainable work activity, attracted many studies to gain a better understanding of this subject.

264. Investigation on the impacts of COVID-19 quarantine on society and environment: Preventive measures and supportive technologies

By: Kumaravel, Santhosh Kumar; Subramani, Ranjith Kumar; Sivakumar, Tharun Kumar Jayaraj; Elavarasan, Rajvikram Madurai; Vetrichevan, Ajayragavan Manavalanagar; Annam, Annapurna; Subramaniam, Umashankar

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Lockdown has made some impacts on human society such as negative psychological effects due to quarantine, loss in the economy of the world, reduction in pollution due to less movement of vehicles and closure of many industries.

Quoted statement: It's visible that the number of people infected is increasing day by day and the medical community is tirelessly working to maintain the situation under control. Other than the negative effects caused by COVID-19, it is also equally important for the public to understand some of the positive impacts it has directly or indirectly given to society.

265. Is the lockdown important to prevent the COVID-19 pandemic? Effects on psychology, environment and economy-perspective

By: Atalan, Abdulkadir

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Development of psychological effects such as depression and anxiety, reduced emission levels have led to purification of air quality, and an economic disaster due to closure of industries and loss of employment

Quoted statement: COVID19's daily increasing cases and deaths have led to worldwide lockdown and quarantine. The lockdown has shown that the spread of the virus can be significantly reduced but it has presented an emergence of psychological disorders and economic decline

266. Is There a Role for Environmental and Metabolic Factors Predisposing to Severe COVID-19?

By: Bornstein, Stefan R.; Voit-Bak, Karin; Schmidt, Dieter; Morawietz, Henning; Bornstein, Alexander Benjamin; Balanzew, Waldimir; Julius, Ulrich; Rodionov, Roman N.; Biener, Anne Maria; Wang, Jun; Schulte, Klaus-Martin; Krebs, Peter; Vollmer, Guenter; Straube, R.

Countries of focus: Europe

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Consumptions of water with high levels of chlorine exhibit a higher death rate in the current pandemic, exposure to environmental pollutants increases the incidences of diseases such as diabetes weakening the immune system thus increasing the risk of contracting the coronavirus

Quoted statement: Globally, there have been a striking difference in the mortality rates. this has been attributed to the obvious difference of dissemination and efficiency containment in different countries.

267. Lessons learned and questions raised during and post-COVID-19 anthropopause period in relation to the environment and climate

By: Zerefos, Christos S.; Solomos, Stavros; Kapsomenakis, John; Poupkou, Anastasia; Dimitriadou, Lida; Polychroni, Iliana D.; Kalabokas, Pavlos; Philandras, Constandinos M.; Thanos, Dimitris

Countries of focus: Europe

Type of analysis: Review

Impact type: Both

Impact pathways: The COVID-19 anthropopause period resulted in a remarkable drop of atmospheric pollutant concentrations in Europe, resembling the anticipated 2050 Green Deal conditions, significant correlation between spread of the virus, cold temperatures and lower relative humidity, Contradictory results that show high temperatures favour spread of the virus, melting of glaciers can cause new and unknown epidemics

Quoted statement: The findings of this paper bring us before new challenges and directions in climate change research. Glacier retreating and thawing of permafrost layers expected in the forthcoming decades may result in new and unknown epidemics posing new horrifying threats to mankind. It is important that combined atmospheric and epidemiological studies as well as detailed scientific expeditions should be organized to investigate such health-related aspects of climate change.

268. Minimizing the present and future plastic waste, energy and environmental footprints related to COVID-19

By: Klemes, Jiri Jaromir; Van Fan, Yee; Tan, Raymond R.; Jiang, Peng

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: The surge in COVID-19 cases have resulted in increase in critical hazardous waste emerging due to the need to ensure destruction of residual pathogens in household and medical waste

Quoted statement: The COVID-19 pandemic has had growing environmental consequences related to plastic use and follow-up waste, but more urgent health issues have far overshadowed the potential impacts. The sudden shift in waste composition and quantity highlights the need for a dynamically responsive waste management system.

269. Nurture to nature via COVID-19, a self-regenerating environmental strategy of environment in global context

By: Paital, Biswaranjan

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Reduction of human dominancy in the environment has resulted to lower levels of emission leading to elevation of biodiversity, shut down of transport systems have resulted into reduced levels of noise pollution

Quoted statement: Nature and its natural resources are over exploited by human for whom regular international and national meetings are held in our planet albeit expected results at the field level are always not satisfactory. The world has witnessed many such intra and inter-nation gatherings without any substantial results to save the environment.

270. Observed and Potential Impacts of the COVID-19 Pandemic on the Environment

By: Cheval, Sorin; Adamescu, Cristian Mihai; Georgiadis, Teodoro; Herrnegger, Mathew; Piticar, Adrian; Legates, David R.

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Changes in national budget and funding may lead to lack of funding of water related infrastructure and utilities, lockdown has resulted in reduced levels of emission leading to a cleaner air quality, poor disposal of sanitary consumables is affecting the water bodies

Quoted statement: The COVID-19 pandemic has triggered unprecedented environmental impacts in terms of spatial extent, complexity and even uniqueness.

271. OPERATING IN A COVID-19 ENVIRONMENT FROM SHUT DOWN TO REOPENING: INDUSTRY INSIGHTS

By: Harris, Becky; Whittemore, Ellen; Valentine, Virginia; Jones Blackhurst, Jan; Morgan, Sandra Douglass

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Both

Impact pathways: Lockdown led to closure of industries which resulted into loss of income and unemployment, reopening is a sign of hope as people will try to rebuild and regain what they have lost to the pandemic

Quoted statement: As confirmed reports of the spread of coronavirus (COVID-19) outside of China began to grow, the world still had no idea just how stealthy and tenacious COVID-19 is. Indeed, just 23 short days later, the U.S. declared a public health emergency.

272. Pandemics and the Environmental Rebound Effect: Reflections from COVID-19

By: Freire-Gonzalez, Jaume; Font Vivanco, David

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: Expansion of teleworking services can reallocate space and incomes in office rental market, changes in sufficiency measures and broader productivity lead to macro-economic rebound effects, implementation and use of digital technologies

Quoted statement: The COVID-19 pandemic will likely cause a range of changes in society, but their permanence and impacts on the environment is unclear, especially if we contemplate the secondary effects of behaviors, measures, and policies.

273. Plausible Role of Environmental Factors on COVID-19 Transmission in the Megacity Delhi, India

By: Babu, Saginela Ravindra; Rao, N. Narasimha; Kumar, S. Vijaya; Paul, Surender; Pani, Shantanu Kumar

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Negative

Impact pathways: Exposure to air pollution causes acute respiratory inflammation, asthma and might increase the risk of contracting the COVID-19 virus, respiratory diseases are more common in the winter and early spring thus the occurrence of COVID-19 might partially be subjected to environmental and meteorological conditions

Quoted statement: The world is presently going through a very distressing stage with the spread of Coronavirus disease 2019 (COVID-19). This is highly contagious and has been declared as a pandemic.

274. Post COVID-19 lesson: Understand the environment for human survival and sustenance

By: Pai, I. K.

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Positive

Impact pathways: To improve air quality, water and environment in general, money doesn't not have to be involved. Give the environment a break and nature will bounce back to normalcy just like we have witnessed during the lockdown

Quoted statement: There has always been competition between Nature and man. Following the pandemic, several countries are on the verge of economic bankruptcy. On the other hand, Nature has bloomed within 480 hrs of the world lockdown.

275. Pre-to-post lockdown impact on air quality and the role of environmental factors in spreading the COVID-19 cases-a study from a worst-hit state of India

By: Sahoo, Prafulla Kumar; Mangla, Sherry; Pathak, Ashok Kumar; Salamao, Gabriel Negreiros; Sarkar, Dibyendu

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Lockdown reduced the level of air pollutants in most cities, reduced temperatures are favourable in transmitting the disease as the virus is more active in cold weather

Quoted statement: A sharp decline in most of the major air pollutants in most of the cities during lockdown clearly illustrates a rare benefit and a blessing of forced lockdown that shut down most of the anthropogenic activities such as industries, heavy traffic, road, and infrastructure construction activities, which are substantial contributors to both fractions of particulate matter and other air pollutants

276. Public Awareness of Nature and the Environment During the COVID-19 Crisis

By: Rousseau, Sandra; Deschacht, Nick

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: The COVID-19 restrictions such as work at home policies have encouraged people to be more in touch with nature as they are appreciating the importance of the local green and blue spaces, the restrictions have also reduced the rate of pollution thereby purifying the air

Quoted statement: As our behavioral patterns change due to the COVID-19 crisis, our impact on nature and the environment changes too. Pollution levels are showing significant reductions. People are more aware of the importance of access to local green and blue spaces.

277. Rapid tool based on a food environment typology framework for evaluating effects of the COVID-19 pandemic on food system resilience

By: Ahmed, Selena; Downs, Shauna M.; Yang, Chunyan; Long Chunlin; ten Broek, Noah; Ghosh-Jerath, Suparna

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: Informal built food environments that rely on local agricultural products will be more resilient compared to formal built food environments that are dependent on lengthy global supply chain that have been disrupted by Covid restrictions

Quoted statement: The COVID-19 and associated mitigation measures are highlighting resiliency and vulnerability of food systems with consequences for diets, food security, and health outcomes. Frameworks and tools are called for to evaluate impacts of the COVID-19 pandemic as well as identify entry points for implementing preparedness efforts.

278. Responding to COVID-19 requires strong epidemiological evidence of environmental and societal determining factors

By: Zeka, Ariana; Tobias, Aurelio; Leonardi, Giovanni; Bianchi, Fabrizio; Lauriola, Paolo; Crabbe, Helen; Vardoulakis, Sotiris; Guo, Yuming; Honda, Yasushi; Gasparrini, Antonio; Hashizume, Masahiro; Vicedo, Ana Maria; Knudsen, Lisbeth E.; Sera, Francesco; Ashworth, Matthew

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Climatic and environmental factors such as temperature, humidity and air pollution are potentially influencing the spread and severity of COVID-19

Quoted statement: COVID-19 has caused a global emergency that requires an engaged, integrated interdisciplinary, and rapid response from the scientific community. Climate change, ecological change, and biodiversity loss might have played an important role in the occurrence of this zoonotic pandemic.

279. Review of environmental challenges and pandemic crisis of Covid-19

By: Poursadeqiyan, Mohsen; Bazrafshan, Edris; Arefi, Maryam Feiz

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: Use of large volumes of disinfectants, in addition to cost loss will lead to respiratory problems and soil pollution, poor disposal of non-biodegradable waste can cause complication in animals or children

Quoted statement: Spread of novel coronavirus has become a global crisis. Some measures such as excessive use of disinfectants, increased production of nonbiodegradable waste, and water pollution will be the consequences of fighting against coronavirus disease 2019 (COVID-19), which harms the environment.

280. Safety of foods, food supply chain and environment within the COVID-19 pandemic

Comment

By: Rizou, Myrto; Galanakis, Ioannis M.; Aldawoud, Turki M. S.; Galanakis, Charis M.

Countries of focus: Global

Type of analysis: Review

Impact type: Negative

Impact pathways: The lockdown has disrupted the food supply chain causing food insecurity globally, Poor sanitation in food handling can easily transmit the virus, the virus can also be transmitted from air through inhaling particles and from surfaces

Quoted statement: The COVID-19 pandemic has generated a new era in the world while we still figure out the consequences in different aspects of our daily life. The food supply chain and the food industry do not comprise an exception.

281. Short-run environmental effects of COVID-19: Evidence from forest fires

By: Paudel, Jayash

Countries of focus: Nepal

Type of analysis: Review

Impact type: Positive

Impact pathways: Community managed forests with smaller areas experienced a decrease in forest fire incidences due to lockdown

Quoted statement: COVID-19 has a strong, negative effect on the incidence of human-induced forest fires. Results indicate that an additional reported case of COVID-19 resulted in a 4.54% decrease in the number of unique forest fire incidents and a 11.36% reduction in fire radiative power associated with these events.

282. Significant impacts of COVID-19 lockdown on urban air pollution in Kolkata (India) and amelioration of environmental health

By: Bera, Biswajit; Bhattacharjee, Sumana; Shit, Pravat Kumar; Sengupta, Nairita; Saha, Soumik

Countries of focus: India

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: The lockdown has led to the purification of the environment and air quality due to restricted anthropogenic activities **Quoted statement:** The fatal COVID-19 pandemic disease smashes the normal tempo of global socio-economic and cultural livelihood. Most of the countries impose a lockdown system with social distancing measures to arrest the rapid transmission of this virus into the human body.

283. Single-Use Plastics and COVID-19: Scientific Evidence and Environmental Regulations

By: Hale, R. C.; Song, B.

Countries of focus: United States

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Reusable grocery bags place people at substantial risk to COVID-19 infection

Quoted statement: The COVID-19 pandemic is expected to push back on reusable bag usage and restrictions on single-use plastics.

284. Spatiotemporal Patterns of COVID-19 Impact on Human Activities and Environment in Mainland China Using Nighttime Light and Air Quality Data

By: Liu, Qian; Sha, Dexuan; Liu, Wei; Houser, Paul; Zhang, Luyao; Hou, Ruizhi; Lan, Hai; Flynn, Colin; Lu, Mingyue; Hu, Tao; Yang, Chaowei

Countries of focus: China

Type of analysis: Analysis using primary data

Impact type: Both

Impact pathways: COVID-19 related restrictions have reduced the rate of pollution thereby increasing the air quality, lockdown has caused loss of income due to closing of companies and businesses

Quoted statement: The COVID-19 crisis has introduced crucial impacts on people's daily lives, production, and the environment by restricting people to stay at home and reduce non-essential production.

285. Sport, Tourism and environment: rethinking local development in the times of Covid-19

By: Giuntarelli, Paolo

Countries of focus: Not specific

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Movement restriction limits people from travelling hence less income for tourist sector.

Quoted statement: -

286. Stepping up and stepping out of COVID-19: New challenges for environmental sustainability policies in the global airline industry

By: Amankwah-Amoah, Joseph

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Upgrading to environmentally friendly aircrafts, practicing in-flight social distancing, reductions of refreshments provided on flights

Quoted statement: Researchers, governments and policymakers have become increasingly concerned about the negative effects of COVID-19 on business activities, industry policies and the global economy. Despite the plethora of new lines of research on COVID-19 and businesses becoming beleaguered by the accompanying uncertainties, there remains a dearth of research examining the effects on environmental sustainability policy implementations and new challenges

287.Strategic decisions on urban built environment to pandemics in Turkey: Lessons from COVID-19

By: Ahsan, Md Moynul

Countries of focus: Turkey

Type of analysis: Review

Impact type: Positive

Impact pathways: Comprehensive community planning, increased social interaction through creation of safe public spaces,

Quoted statement: COVID-19 is a global pandemic where urban built environment is facing significant challenges. Deploying robust strategic planning and decisions on built environment can overcome or reduce such challenges

288.Suggestions for a Covid-19 Post-Pandemic Research Agenda in Environmental Economics

By: Elliott, Robert J. R.; Schumacher, Ingmar; Withagen, Cees

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Transition to a sustainable low carbon economy, increasing the carbon tax

Quoted statement: Any pandemic that leads to a lockdown, such as in the case of the 2020 Covid-19 pandemic, naturally gives rise to questions about what this means for economic growth

289.The current effects of the spread of COVID-19 in learning environments involving Japanese college students: what is the state of those environments elsewhere in the world?

By: Inoue, Ken; Takeshita, Haruo; Ohira, Yoshiyuki

Countries of focus: Japan

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Restrictions such as self-isolation, closure of business and restricted movements have led to loss of income leading to high number of schools drop-outs, closure of schools have led to disruptions of learning programme

Quoted statement: The growing numbers of COVID-19 patients have led to lockdowns all across the world with the aim of managing the spread of the virus. schools have been closed down indefinitely leading to disruptions of learning programmes

290.The dark cloud with a silver lining: Assessing the impact of the SARS COVID-19 pandemic on the global environment

By: Lal, Preet; Kumar, Amit; Kumar, Shubham; Kumari, Sheetal; Saikia, Purabi; Dayanandan, Arun; Adhikari, Dibyendu; Khan, M. L.

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: Risk reduction measures such as social distancing, lockdowns and mass quarantine, travel bans and disruptions to transportation systems have led to reduced aerosols and atmospheric pollutants due to disruption of anthropogenic-based emissions

Quoted statement: The COVID-19 pandemic outbreak had brought major economic disruption in the world, with disruptions in global supply chains, business and consumer confidence, the decline in commodity prices, international tourism and business travel, and less demand for imported goods and services

291. The effect of COVID-19 lockdown on the air environment in India

By: Gupta, N.; Tomar, A.; Kumar, V.

Countries of focus: India

Type of analysis: Review

Impact type: Positive

Impact pathways: Lockdown has substantially decreased carbon emissions due to industry and business closures, and improved air quality index. temperatures and humidity has also reduced

Quoted statement: COVID-19 is a huge tragedy for the world community. A large number of deaths in the whole of India is attributed to the problems associated with air pollution.

292. The impacts of COVID-19 measures on global environment and fertility rate: double coincidence

By: Anser, Muhammad Khalid; Yousaf, Zahid; Khan, Muhammad Azhar; Xuan Hinh Voo; Nassani, Abdelmohsen A.; Alotaibi, Saad M.; Abro, Muhammad Moinuddin Qazi; Zaman, Khalid

Countries of focus: Global

Type of analysis: Review

Impact type: Positive

Impact pathways: The work at home, closures and lockdown increase the leisure time thus increasing fertility across the globe, the measures increase global poverty risk and vulnerable employment, decrease carbon emissions and improve air quality

Quoted statement: COVID-19 measures substantially decrease carbon emissions due to nationwide industry lockdown and improve global air quality index. The measures also increase the decision of newborn babies in the family circle. the restrictions

293. The Impacts of Fear and Uncertainty of COVID-19 on Environmental Concerns, Brand Trust, and Behavioral Intentions toward Green Hotels

By: Jian, Yufan; Yu, Irina Y.; Yang, Morgan X.; Zeng, Kevin J.

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Fear and uncertainty of COVID-19 have a significant positive impact on consumers' environmental concerns and subsequently reinforce their green hotel brand trust and behavioral intentions toward green hotels

Quoted statement: COVID-19 plunged a knife in the collective heart of the global hotel industry and in one fell swoop destroyed demand, sending revenue and profit to historically low levels. Although many people are extremely fearful of COVID-19, there is some optimism that this very fear may also alert people to the importance of environmental protection and thus strengthen their green consumption tendencies in the hotel industry.

294. The influence of empowered work environments on the psychological experiences of nursing assistants during COVID-19: a qualitative study

By: Travers, Jasmine L.; Schroeder, Krista; Norful, Allison A.; Aliyu, Sainfer

Countries of focus: United States

Type of analysis: Analysis using primary data

Impact type: Positive

Impact pathways: Increased access to resources to facilitate the ability of nurses to work effectively, allowing innovation and contribution of nurses to decision making process when new opportunities present themselves, conveying information to nurses to alleviate fear and increase preparedness

Quoted statement: Nursing assistants are important to patient care delivery, yet are undervalued, underutilized, and often poorly treated. Empowerment of nursing assistants has been is crucial as an approach to improving morale and job satisfaction among nursing assistants thereby leading to decreases in turnover and better patient outcomes.

295. The role of the environment and its pollution in the prevalence of COVID-19

By: Daraei, Hasti; Toolabian, Kimia; Kazempour, Marzieh; Javanbakht, Mohammad

Countries of focus: Global

Type of analysis: Conceptual analysis with insights

Impact type: Negative

Impact pathways: Particles in the atmosphere resulting from pollution act as carriers for transmitting and spreading the virus, some gases in the atmosphere affect the respiratory organs increasing the risk of contracting the virus

Quoted statement: COVID-19 is a virus with a high transmission rate that can be transmitted through direct contact and indirect contact. Many efforts have been made to reduce direct contacts and personal hygiene, but the disease still prevails

296. The Short-run and Long-run Effects of Covid-19 on Energy and the Environment Comment

By: Gillingham, Kenneth T.; Knittel, Christopher R.; Li, Jing; Ovaere, Marten; Reguant, Mar

Countries of focus: United States

Type of analysis: Review

Impact type: Both

Impact pathways: Lockdown and movement restrictions have reduced the emission levels of greenhouse gases which affect the environment, changes in behavior and investment is likely to affect the energy sector due to reduced demands

Quoted statement: Covid-19 has directly led all of the world's largest economies to come to a near-standstill, with widespread shutdowns and restrictions remaining even when shutdowns have been relaxed. The long-run effects are highly uncertain. How the pandemic influences emissions and health outcomes in the long run depends on how long it takes to bring the pandemic under control and whether the pandemic leads to a persistent economic contraction.

297. Wildfire and COVID-19 pandemic: effect of environmental pollution PM-2.5 and car on monoxide on the dynamics of daily cases and deaths due to SARS-COV-2 infection in San-Francisco USA

By: Meo, S. A.; Abukhalaf, A. A.; Alomar, A. A.; Alessa, O. M.

Countries of focus: United States

Type of analysis: Review

Impact type: Negative

Impact pathways: Wildfire increases the risk of respiratory and cardiovascular diseases and this increases the mortality of COVID-19 infection

Quoted statement: Environmental pollution is a growing public health concern. It changes the environment, weather conditions, and increases the risk for respiratory, cardiovascular, endocrine and nervous system diseases. environmental pollution increases the incidence and mortality of SARS-COV infection

g) Migration

298. COVID-19 outbreak: Migration, effects on society, global environment and prevention

By: Chakraborty, Indranil; Maity, Prasenjit

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Loss of lives, demobilized global economy due to lockdown, reduction of pollution levels due to reduced emissions in the atmosphere

Quoted statement: COVID-19, apart from becoming the greatest threat to global public health of the century, is being considered as an indicator of inequity and deficiency of social advancement.

299. The Relationship between the Migrant Population's Migration Network and the Risk of COVID-19 Transmission in China-Empirical Analysis and Prediction in Prefecture-Level Cities

By: Fan, Chenjing; Cai, Tianmin; Gai, Zhenyu; Wu, Yuerong

Countries of focus: China

Type of analysis: Field data

Impact type: Negative

Impact pathways: Return of migrants from affected places to their birth places causes long distance transmission

Quoted statement: The impact of COVID-19 has been significant, raising concerns regarding public health risks in China and worldwide. Migration may be the primary reason for the long-distance transmission of the disease.

300. COVID-19 and digital disruption in UK universities: afflictions and affordances of emergency online migration

By: Watermeyer, Richard; Crick, Tom; Knight, Cathryn; Goodall, Janet

Countries of focus: United Kingdom

Type of analysis: Field data

Impact type: Both

Impact pathways: The online migration causes social disconnection for those with inadequate access to online technology and might cause mental health issues, it is a major challenge for

student recruitment, it also increased communication between parties who initially did not interact much such as the older and the younger faculty

Quoted statement: COVID-19 has caused the closure of university campuses around the world and migration of all learning, teaching, and assessment into online domains. The impacts of this on the academic community as frontline providers of higher education are profound.

301. Covid-19 and inter-provincial migration in China

By: Shen, Jianfa

Countries of focus: China

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: The migrants who moved into Hubei in 2010–2015 is a good indicator of the population flow from Hubei to other provinces that caused the spread of covid-19 in early 2020 as migrants travelled back home before the traffic ban.

Quoted statement: There is great concern on the growth and spread of covid-19 which affects the public health and economy enormously. Migration, urban population growth and high population density are considered major factors

302. What Drives Successful Administrative Performance during Crises? Lessons from Refugee

Migration and the Covid-19 Pandemic

By: Schomaker, Rahel M.; Bauer, Michael W.

Countries of focus: Germany

Type of analysis: Conceptual

Impact type: Positive

Impact pathways: Inter-crisis learning which enhances preparedness and intra-crisis learning increases performance in terms of stakeholder networking

Quoted statement: The Covid-19 pandemic challenges not only affect the health sectors in countries worldwide but also their public administration systems. Executing the necessary actions to ensure public health, such as tracking infections or organizing local health care, takes focus and binds capacities.

303. Impact of Migration of Labour Force due to Global COVID-19 Pandemic with Reference to India

By: Khanna, Anoop

Countries of focus: India

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: Food insecurity and loss of jobs has forced migrants to move back to the native hometowns, massive migration speeds up the rate of infection

Quoted statement: Whether it is economic recession or an epidemic like COVID-19, migrant workers in large cities are

forced either to stay in perilous conditions in the urban areas or go back to their places of origin villages. Initially, they change from becoming providers of remittance incomes to their households, to becoming dependents of these households.

304. Massive migration promotes the early spread of COVID-19 in China: a study based on a scale-free network

By: Song, Wen-Yu; Zang, Pan; Ding, Zhong-Xing; Fang, Xin-Yu; Zhu, Li-Guo; Zhu, Ya; Bao, Chang-Jun; Chen, Feng; Wu, Ming; Peng, Zhi-Hang

Countries of focus: China

Type of analysis: Field data

Impact type: Negative

Impact pathways: Largescale migration on the eve of lunar new year accelerated the spread of the disease

Quoted statement: The epidemic seriousness in Hubei was closely correlated with the migration from Wuhan between January 10 and January 24, 2020. The epidemic seriousness in the other provinces, municipalities and autonomous regions was largely affected by the immigration from Wuhan.

305. Exploring the young demographic profile of COVID-19 cases in Hong Kong: Evidence from migration and travel history data

By: Cruz, Christian Joy Pattawi; Ganly, Rachel; Li, Zilin; Gietel-Basten, Stuart

Countries of focus: China

Type of analysis: Field data

Impact type: Negative

Impact pathways: Majority of the cases are imported by residents who are studying or working abroad between the age of 15-24

Quoted statement: While the majority of cases in most territories around the world have fitted an older age profile, our analysis shows that positive cases in Hong Kong have been concentrated among younger age groups, with the largest incidence of cases reported in the 15–24 age group.

306. Serbia in the time of COVID-19: between corona diplomacy

By:

Countries of focus: Serbia

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: The pandemic gave rise to new forms of returnee and refugee mobility which accelerated the spread of the virus, the lockdown caused loss of jobs and income

Quoted statement: The global COVID-19 pandemic and the measures taken by the government aimed at stemming the spread of the virus have placed a heavy burden on economic activities and the healthcare system, as well as Serbia's geopolitical position. In conditions whereby the major geopolitical players are using soft power in their foreign policy, Serbia has found itself in a coronavirus diplomacy triangle between China, Russia and the EU.

307. The introduction of population migration to SEIAR for COVID-19 epidemic modeling with an efficient intervention strategy

By: Chen, Min; Li, Miao; Hao, Yixue; Liu, Zhongchun; Hu, Long; Wang, Lin

Countries of focus: Global

Type of analysis: Conceptual

Impact type: Positive

Impact pathways: Home confinement reduces person to person contact thus reduces rate of transmission, medical resource allocation in severe areas, use of advance mobile networking and health care systems

Quoted statement: Based on the results of our simulations, some interventions are needed to control the spread of COVID-19. Home confinement re-duces person-to-person contact and can

effectively reduce the rate of transmission and the number of people infected. In addition, if earlier measures to control person-to-person contact are implemented, the faster the spread of the virus is controlled.

308. On the Coattails of globalization: migration, migrants and COVID-19 in Asia

By: Suhardiman, Diana; Rigg, Jonathan; Bandur, Marcel; Marschke, Melissa; Miller, Michelle Ann; Pheuangsavanh, Noudsavanh; Sayatham, Mayvong; Taylor, David

Countries of focus: Asia

Type of analysis: Field data

Impact type: Negative

Impact pathways: Informal migrants faced elevated exposure to the virus under conditions of forced evictions, food shortages, loss of jobs without compensation payment, quarantining in unhygienic conditions, lack of education and technical skills to climb out of poverty

Quoted statement: COVID-19 is neither distant nor remote. We are all participants in navigating new pathways through this global pandemic, but we do so from unequal positions in society and the economy. With prevailing inequalities becoming amplified as the coronavirus spreads, the precarity of labour migrants and the central, if largely hidden, role they play in our lives is unfolding as a shared issue that requires collective forms of policy redress.

309. Family-mediated migration infrastructure: Chinese international students and parents navigating (im)mobilities during the COVID-19 pandemic

By: Hu, Yang; Xu, Cora Lingling; Tu, Mengwei

Countries of focus: China

Type of analysis: Field data

Impact type: Negative

Impact pathways: Slow coordinated and developed response to the pandemic, racism aggravated the vulnerability of Chinese students, lack of access to air tickets due to banned flights and closed borders

Quoted statement: The outbreak of the COVID-19 pandemic and associated responses such as border closure, lockdown measures and flight curtailment have severely disrupted transnational infrastructures that sustain, channel, organize and condition international migration. This infrastructural disruption has led to the double exclusion of temporary migrants from both sending and host societies.

310. Population migration, confirmed COVID-19 cases, pandemic prevention, and control: evidence and experiences from China

By: Yang, Hualei; Hu, Sen; Zheng, Xiaodong; Wu, Yuanyang; Lin, Xueyu; Xie, Lin; Shen, Zheng

Countries of focus: China

Type of analysis: Field data

Impact type: Negative

Impact pathways: The increased migration from Wuhan to other cities increased cases of the virus, reducing contact between susceptible population and infected population could effectively lower the number of infected cases

Quoted statement: Under the current international pandemic, which worsens by the day, population migration has a critical effect on the pandemic's spread.

311. Human mobility restrictions and inter-provincial migration during the COVID-19 crisis in China

By: Li, Angran; Liu, Zhen; Luo, Mengsha; Wang, Yan

Countries of focus: China

Type of analysis: Review

Impact type: Both

Impact pathways: Mobility restrictions on population flow reduced the inflows and outflows of inter-provincial migration this reducing the rate of infection, the restrictions lead to a decline in the economic status of the country

Quoted statement: China's strict mobility restrictions lead to success in controlling the spread of the COVID-19 and saving people's lives, but this success is not without cost. China's GDP in the first quarter of 2020 shrank by 6.8 percent

312. Migration and reverse migration: Gulf-Malayalees' perceptions during the Covid-19 pandemic

By: Menon, Devaki Vadakepat; Vadakepat, Vanaja Menon

Countries of focus: United Arab Emirates

Type of analysis: Review

Impact type: Negative

Impact pathways: Loss of jobs, income and the risk of contracting the virus forced the Indian nationals to return home,

Quoted statement: Irrespective of a nation's economic, regional and demographic diversity, the Covid-19 pandemic demonstrated that no country was immediately and adequately prepared to face such a threat at the scale that it is now at.

313. COVID-19 crisis and urbanization, migration and inclusive city policies in India: A new theoretical framework

By: Panwar, Namrata. S.; Mishra, Alok Kumar

Countries of focus: India

Type of analysis: Review

Impact type: Positive

Impact pathways: Provision of infrastructure and affordable housing to mitigate congestion diseconomies, cities should be prepared with planning, financing and governance mechanism to create the infrastructure needed by employment-generating activities

Quoted statement: COVID-19 global pandemics which has forced migrant labours (the engine of a globalized economic system) to shift from the urban areas to their origin. This migration crisis has put a serious challenge for the revitalization of the city economy in the post lockdown period.

314. Stage migration of colorectal cancer during COVID-19 pandemic

By: Liyanage, A. S. D.; Gokul, K.; Babu, B. H.; Ainsworth, P.

Countries of focus: United Kingdom

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: Following the outbreak of the COVID-19 pandemic, treatments of colorectal cancer have been differed revised to minimize the risks of coronavirus, delay in diagnosis and treatments of patients with early stage cancer will increase the likelihood of the cancer spread

Quoted statement: All cancer pathways across the UK have been adversely affected by the implications of COVID-19 pandemic. Treatments of large number of CRC, have been either deferred or revised to minimise the detrimental outcomes of concurrent SARS-CoV-2 infection

315. Migratory Pulmonary Infiltrates in a Patient With COVID-19 Infection and the Role of Corticosteroids

By: John, Teny M.; Malek, Alexandre E.; Mulanovich, Victor E.; Adachi, Javier A.; Raad, Issam I.; Hamilton, Alexis Ruth; Shpall, Elizabeth J.; et al

Countries of focus: Global

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: Organizing pneumonia in the patient could be due to an immune activation following cessation of ibrutinib or augmentation of immune response by convalescent plasma

Quoted statement: Organizing Pneumonia as a delayed presentation of COVID-19, should be considered for which corticosteroids have significant benefit. Moreover, given the increasing use of convalescent plasma, OP as a possible downstream consequence should be investigated.

316. Traveler as a risk factor for migration of COVID-19 in India

By: Chakraborty, Indranil; Sen, Ipsita K.; Mondal, Soumitra; Bar, Harekrishna; Nayak, Abhijit; Bhanja, Sunil K.; Maity, Prasenjit

Countries of focus: India

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: Most COVID-19 cases result from students and workers returning home due to the pandemic from various parts of the world

Quoted statement: Control and prevention of the disease is very difficult in India due to its large population. Moreover, since during the first two weeks of March 2020 it was observed that almost all the confirmed COVID-19 cases in India either had a history of travel to COVID-19 affected countries or had direct connections to the persons coming from these countries, it therefore became important to control the outbreak of coronavirus, by imposing restriction on travel from other countries.

317. Can we migrate COVID-19 spreading risk?

By: Chen, Qingyan

Countries of focus: Global

Type of analysis: Review

Impact type: Both

Impact pathways: Virus transmission through small droplets and aerosols in schools, transport vehicles and even factories if the atmosphere is contaminated, social distancing and wearing of masks reduces the risk of contracting the virus

Quoted statement: It is well recognized that Severe Acute Respiratory Syndrome Coronavirus 2 virus could be spread through touch and large droplets. However, we may have under-estimated the disease transmission by small droplets or aerosols that contain SARS-CoV-2 virus.

318. Commentary: Labour Migration Policy Dilemmas in the Wake of COVID-19

By: Abella, Manolo I.

Countries of focus: Global

Type of analysis: Commentary

Impact type: Both

Impact pathways: Difficulties in recovering from the pandemic's shock depending on how people are re-ordering their priorities and changing their lifestyle, poor health facilities have put

countries in a dilemma on how to face the pandemic, governments have had to deal with the increasing numbers of unemployment through establishment of migrant welfare institutions

Quoted statement: COVID-19 pandemic has already had a catastrophic impact on the global economy, on the mobility of people and goods within and across borders, and on the freedoms that people in most countries have enjoyed for many decades.

319. Commentary: How is COVID-19 Reshaping Labour Migration?

By: Papademetriou, Demetrios G.; Hooper, Kate

Countries of focus: Global

Type of analysis: Commentary

Impact type: Negative

Impact pathways: The end of the pandemic decides when and where immigrants will move, the restrictions of the pandemic has caused unemployment as most immigrants work in agricultural and processing industries which have been shut down, migration has become risky in terms of health risks associated with travel and the uncertainty that may await migrants in the destination countries including ability to find unemployment

Quoted statement: While mobility of all types has been disrupted by restrictions on travel and immigration, it is the economic devastation from the pandemic that will likely have the sharpest and longest effect on migration to advanced economies, and by extension, to prospective migrants and their households, and countries of origin.

320. General Model for COVID-19 Spreading With Consideration of Intercity Migration, Insufficient Testing, and Active Intervention: Modeling Study of Pandemic Progression in Japan and the United States

By: Zhan, Choujun; Tse, Chi Kong; Lai, Zhikang; Chen, Xiaoyun; Mo, Mingshen

Countries of focus: United States and Japan

Type of analysis: Field data

Impact type: Positive

Impact pathways: Stepping up government's active intervention would be more effective for Japan, while raising the level of vigilance of the public in maintaining personal hygiene and social distancing is comparatively more important for the USA

Quoted statement: While some countries have seen peaks of infected cases and observed significant reduction in the number of new infections in the local communities, the spreading has continued in many countries, and surges in infected cases have been observed in. Intercity travel has been found to be a contributing factor to the rapid spread of the virus

321. Adverse articulation: Third countries in China-Australia student migration during COVID-19

By: Haugen, Heidi ostbo; Lehmann, Angela

Countries of focus: Australia

Type of analysis: Field data

Impact type: Positive

Impact pathways: Elongation of travel routes, Adjusting the semester start dates and facilitating late entries, provision of financial incentives to encourage students to report to school

Quoted statement: Southeast Asian countries were articulated with the Australia–China value chain for educational services

early in the COVID-19 outbreak, when travelers from China could enter Australia only via stopovers in third countries. The routes, advertised by migration brokers, allowed Australia to externalize risk of infection while profiting from international student mobility.

322. Conceptualizing the nexus of migration and food security during COVID-19

By: Sharma, Manoj

Countries of focus: Global

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: Migrants are susceptible to COVID-19 due to overcrowding and poor sanitation; the restriction have caused food insecurity due to inaccessibility of markets

Quoted statement: Migration has been a part of the livelihood strategy and risk diversification to relieve crises. Food insecurity is a consequence as well as a cause of migration demands review during the COVID-19 pandemic.

323. What does COVID-19 distract us from? A migration studies perspective on the inequities of attention

By: Della Rosa, Asia; Goldstein, Asher

Countries of focus: Global

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: Most of the attention has been shifted towards ways to curb the pandemic while issues affecting the marginalized communities such as inequality and racism have been neglected considering that these are the groups most vulnerable

Quoted statement: Throughout 2020, movements for solidarity raised their denunciations of the ongoing and constructed border violence globally. Today, amidst the ideological fog of COVID-19 hysteria, such issues are deafening in their absence.

324. Modeling the COVID-19 Pandemic Using an SEIHR Model With Human Migration

By: Niu, Ruiwu; Wong, Eric W. M.; Chan, Yin-Chi; Van Wyk, Michael Antonie; Chen, Guanrong

Countries of focus: China

Type of analysis: Review

Impact type: Both

Impact pathways: Lockdown and isolation helped slow down the rate of infection by stopping all means of migration, migration led to increased rates of infection

Quoted statement: Due to globalization and the proliferation of international travel, many countries are now facing local epidemics. The existence of asymptomatic and pre-symptomatic transmissions makes it more difficult to control disease transmission by isolating infectious individuals.

325. The COVID-19, Migration and Livelihood in India: Challenges and Policy Issues

By: Bhagat, R. B.; Reshmi, R. S.; Sahoo, Harihar; Roy, Archana K.; Govil, Dipti

Countries of focus: India

Type of analysis: Conceptual Review

Impact type: Both

Impact pathways: Internal migrants face problems such as food insecurity, lack of access to health care and lack of transportation to go back to their native lands due to the pandemic, provision of support to return migrants to their native lands is crucial, decentralization as a strategy to provide health services

Quoted statement: COVID-19 has also brought into sharp focus the emigrants from India and the major migration corridors India shares with the world as well. Although state and central

governments have adopted various strategies to deal with these issues, there is a huge uncertainty about how long this crisis will last and what damage it would do to the economy and livelihood of people.

326. Impact of returning population migration after the Chinese Spring Festival on the COVID-19 epidemic

By: Shi, Yaolin; Cheng, Huihong; Ren, Tianxiang; Huang, Luyuan

Countries of focus: China

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: Return of migrant workers and students after the spring festival cause an increase in the number of COVID-19 patients

Quoted statement: Rebound of the epidemic is quite unlikely. Although, the possibility of an epidemic rebound is small, only in conditions of slack thinking and strict measures are carried out. In accordance with the transmission of the world epidemic, more attention must be paid to the inspection of the influx of foreign infected people.

327. Migration and Immigration: Uganda and the COVID-19 Pandemic

By: Igoye, Agnes

Countries of focus: Uganda

Type of analysis: Conceptual

Impact type: Negative

Impact pathways: COVID-19 restrictions have led to closure of borders and grounding of planes affecting migration and immigration, lack of effective border patrol hinders control of the migration and immigration during the pandemic

Quoted statement: COVID-19 has proven that all human beings on the move rich or poor are vulnerable to disease. And now, COVID-19 has disrupted migration, stopping it all together in most parts of the world. Planes are grounded, borders closed, and many countries are under lockdown.