

Opening Pandora's Box

The hidden legacy of COVID-19

15 September 2022

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A COVID Prayer

I hear the voices of those that die
The souls trapped deep inside
They lived to be released to God
Not thrown and left aside

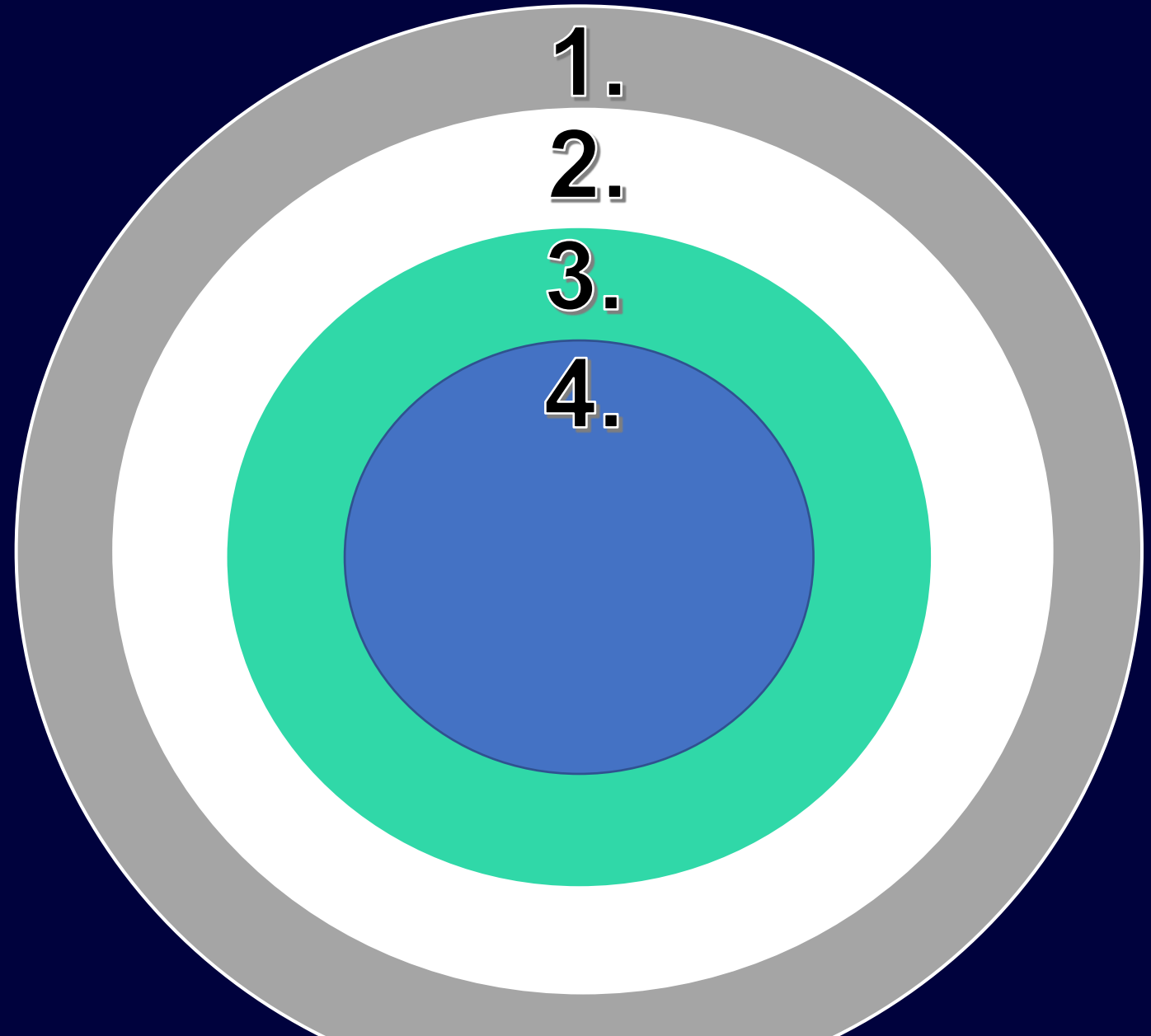
They believed and prayed all through their
lives
So what did they do wrong
They went to pray once more for life
And left us all to cry

Oh God, did they deserve this
What did they do so wrong
But to be poor all through their lives
Then left alone to die

Let's pray for all who left us
During this distressing time
Please give their souls some peace
tonight
Whilst we say our goodbyes
BY M Lakhanpaul 2021

COVID-19 SPREAD

1. GLOBAL
2. REGIONAL
3. COMMUNITY
4. FAMILY



IMPACT: GLOBAL

As of 7 September 2022, there have been 603,711,760 confirmed cases of COVID-19, including 6,484,136 deaths, reported to WHO worldwide.

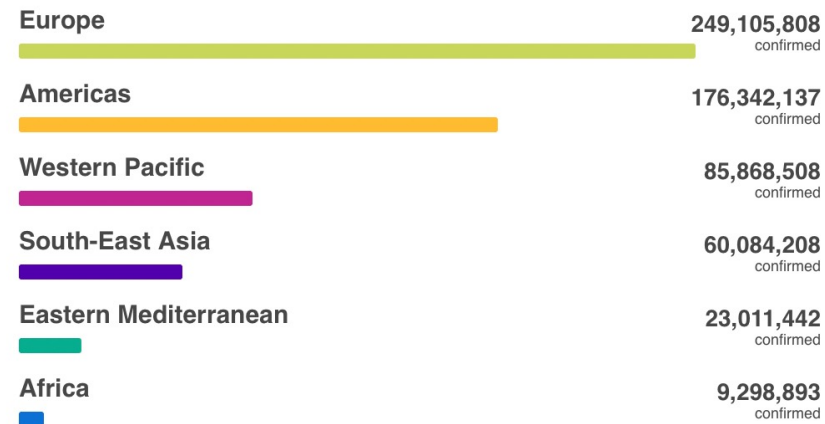
Source: WHO, 2022

Video © Pixabay



IMPACT: REGIONAL

Situation by WHO Region



249,105,808
confirmed

176,342,137
confirmed

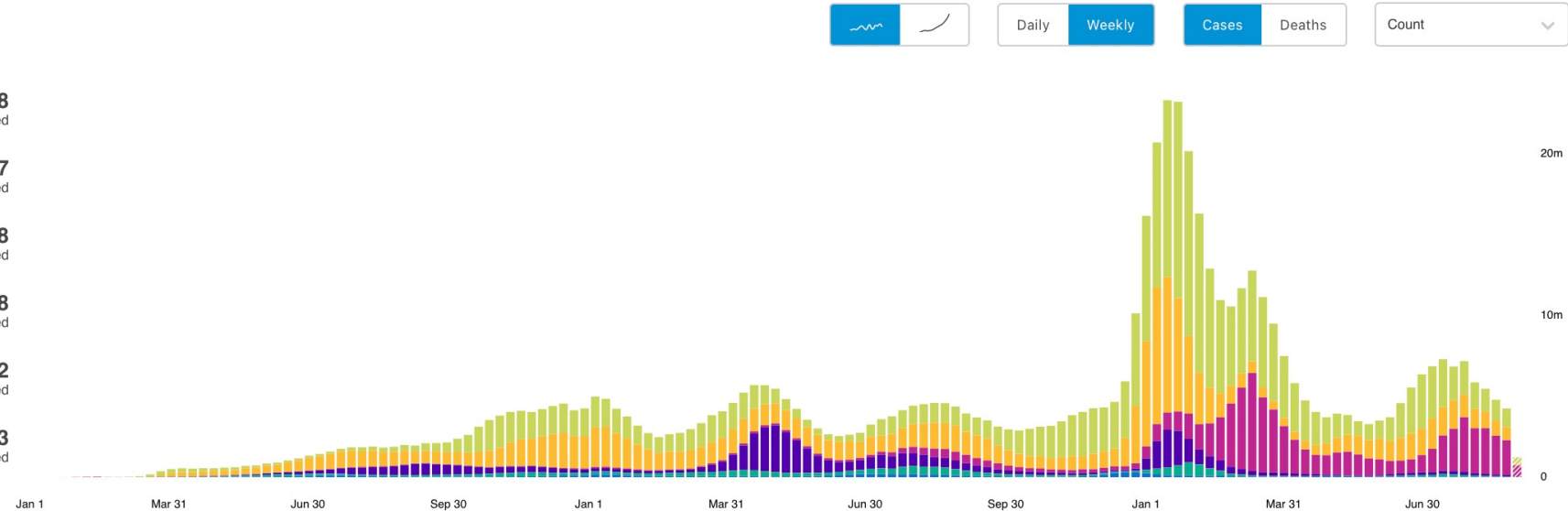
85,868,508
confirmed

60,084,208
confirmed

23,011,442
confirmed

9,298,893
confirmed

Source: World Health Organization
Data may be incomplete for the current day or week.



© WHO, as of 07.09.2022



IMPACT: COMMUNITIES

- 90% of countries still reporting one or more disruptions to essential **health services** in April 2021. ([WHO, 2021](#))
- In the Philippines, 76% of all small and medium-sized **businesses** forced to close by Sep 2020. ([UNCTAD, 2022](#))
- UK Coronavirus Job Retention Scheme used by 11.7m employees at **cost of £70b**. ([UK Parliament, 2022](#))
- 2022 South Africa study of girls found 51% had found it sometimes/often **harder to get emotional support** they needed during COVID-19 and lockdown. ([Duby et al., 2022](#))
- In UK, government announced in March 2021 80+ **NHS-run long COVID clinics** at cost of £6.6bn. ([Baraniuk, 2022](#))



LONG COVID & INEQUALITIES



Health risks

Ethnic
differences

Videos © Pixabay



Frontline workers

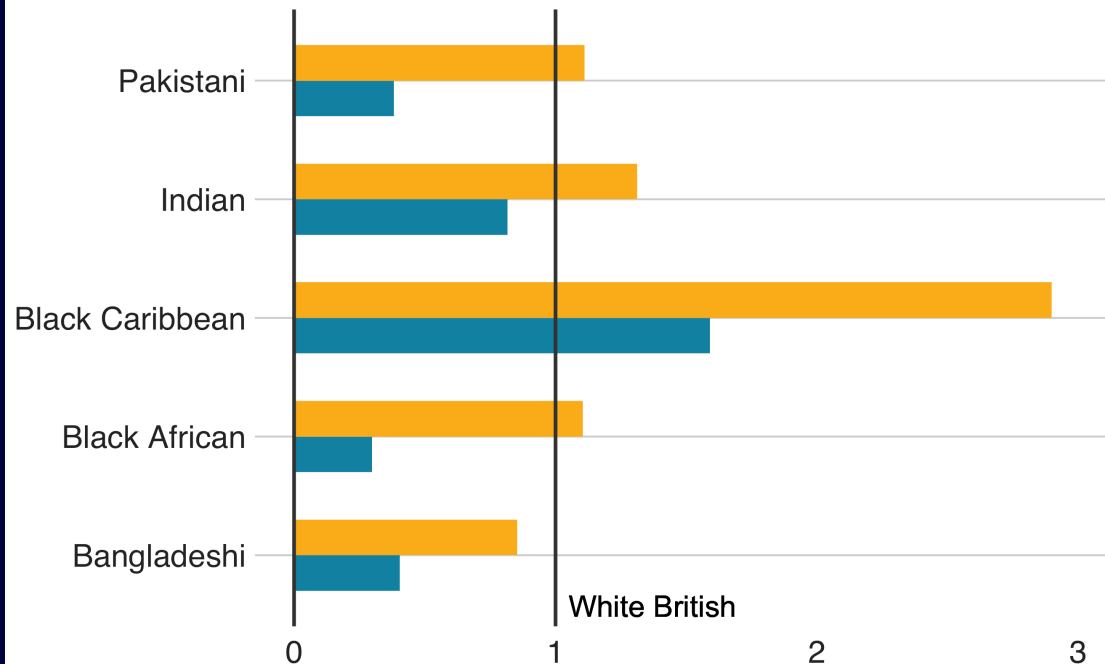


Poor housing & hygiene

Predicted impact of coronavirus

Predicted and actual death rate of minority groups relative to White British population

■ Predicted adjusted for age and location of group ■ Actual hospital deaths



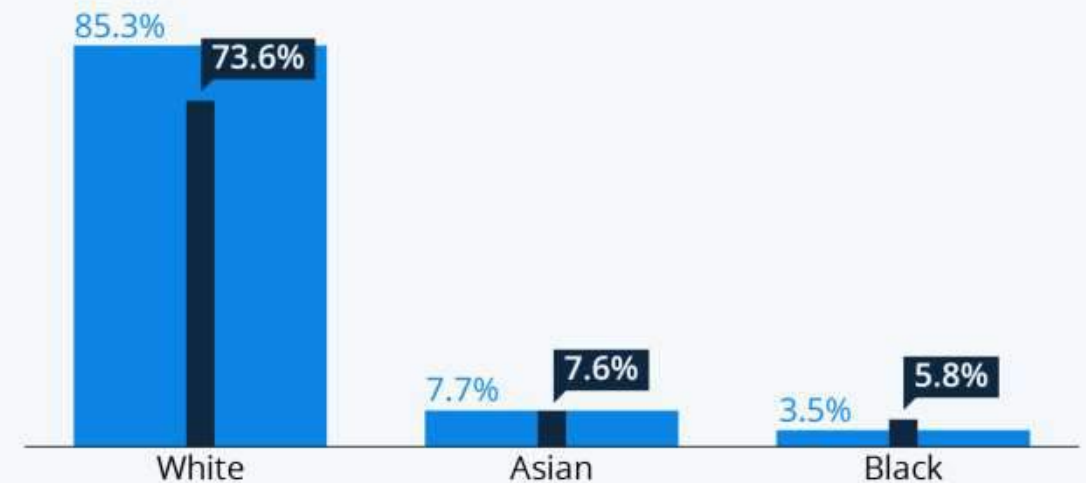
Source: Institute for Fiscal Studies

BBC

England's ethnic Covid-19 deaths disparity

Share of population and share of Covid-19 deaths in England, by ethnicity*

■ Share of population ■ Share of deaths

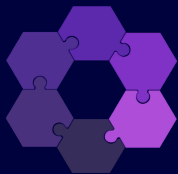


* As of 17 April 2020 at 5pm. Population shares as of 2011 Census. 9.5% of Covid-19 deaths have no ethnicity information.

Sources: NHS England, Office for National Statistics



statista



INEQUALITIES: ETHNIC DIFFERENCES

2022 UK study found that **vaccine uptake** remains lowest in ethnic groups with the highest risk of COVID-19 death in all 3 waves – only 34% of Black Caribbean, 38% of Black African, 38% of Pakistani, and 46% of Bangladeshi adults have had 3 vaccine doses, compared with 68% of White British adults. (Raleigh, 2022)

2020 UK study showed **COVID-19 hospital deaths were highest among black Caribbean population** = 3X those for white British. Bangladeshi hospital fatalities X 2, Pakistani deaths X 2.9 and black African deaths X 3.7 times those of white British group. (Institute for Fiscal Studies, 2020)



INEQUALITIES: POOR HOUSING/HYGIENE

In the 60 countries identified by UNICEF as having the highest risk of health and humanitarian crises due to COVID-19, 2 out of 3 people – 1 billion people in total – still lack basic handwashing facilities with soap and water at home. **Around half are children.** (UNICEF, 2020)

In 2020 US study, each 5% increase in % households with poor housing conditions, there was a **50% higher risk of COVID-19 incidence and 42% higher risk of COVID-19 death.** (Ahmad et al., 2020)



Video © Pixabay

INEQUALITIES: FRONTLINE WORKERS

Higher risk of income loss & infection when working:
disproportionately **young, low educated, migrants, ethnic minorities**
and low-paid occupations. (OECD, 2022)

2022 study of frontline healthcare workers in Pacific region showed
physical exhaustion and mental health challenges exacerbated by
workforce shortages (overwork, limited access to mental health
services, lack of compensation & feelings of isolation, stigma and
discrimination). (Brolan et al., 2022)



Video © Pixabay

INEQUALITIES: HEALTH RISKS

Death - being male; greater age and deprivation; diabetes; severe asthma; and various other medical conditions. (Williamson et al., 2020)

Smokers and former smokers (Subramanian et al., 2022)

Baseline BMI in the overweight or obese range (Subramanian et al., 2022)

Pre-existing conditions (Subramanian et al., 2022)

Cardiometabolic conditions, including type 1 and type 2 diabetes mellitus. Interventions to target multiple risk factors & novel glucose-lowering agents that improve metabolic function recommended for treatment by 2021 study. (Khunti, Davies, Kosiborod & Nauck, 2021)

Video © Pixabay



FAMILIES & LONG COVID THROUGH THE LIFE COURSE

PREGNANT WOMEN

CHILDREN 0-5 YRS

CHILDREN 6-18 YRS

ADULTS

ELDERLY



IMPACT: PREGNANT WOMEN

UK study severe COVID-19 infection
early delivery (before 32 weeks of pregnancy)
had 50X higher risk of induced birth or caesarean
higher chance of birth by pre-labour caesarean section
higher chance of stillborn babies
had 12X increased risk babies being admitted to neonatal
intensive care unit. (Vousden et al., 2022)

Scoping review of 95 studies pregnant women and mothers not found
to be at higher risk for COVID-19 infection, however symptomatic
COVID-19 -more adverse outcomes & socio-economic consequences.
(Kotlar et al., 2021)

Trauma - Prenatal care visits decreased, healthcare infrastructure was
strained. Increase in maternal mental health problems (anxiety and
depression) reported in many countries. (Kotlar et al., 2021)

Video © Pixabay



COVID & Global Child Health



WASTING



An additional **6-7 million children** under 5 may have suffered from wasting or acute malnutrition in 2020.

Due to COVID-19 measures, approximately **80 million children under the age of 1** in at least 68 countries may miss out on receiving life-saving vaccines

Source: WHO, UNICEF, Gavi, and the Sabin Vaccine Institute, 2020, [found here](#)



COVID-19 in the UK



Increased Poverty

- nearly 700,000 more people in the UK are living in poverty in 2020

Domestic abuse cases rising

- Between April and September 2020 there was a **more than 25% increase** of child deaths and incidents of serious harm²

Worse mental and physical health

- No sports, less play with others, isolation, abuse

School closures

- Worse nutrition, less play, no peer support, less education



A child engages with the world through all their senses

See



Smell



Hear



Everything a child encounters impacts their development.

Stressful experiences have negative effects on their brain and mental health, whether that be

- seeing their parents stressed
- hearing people shouting

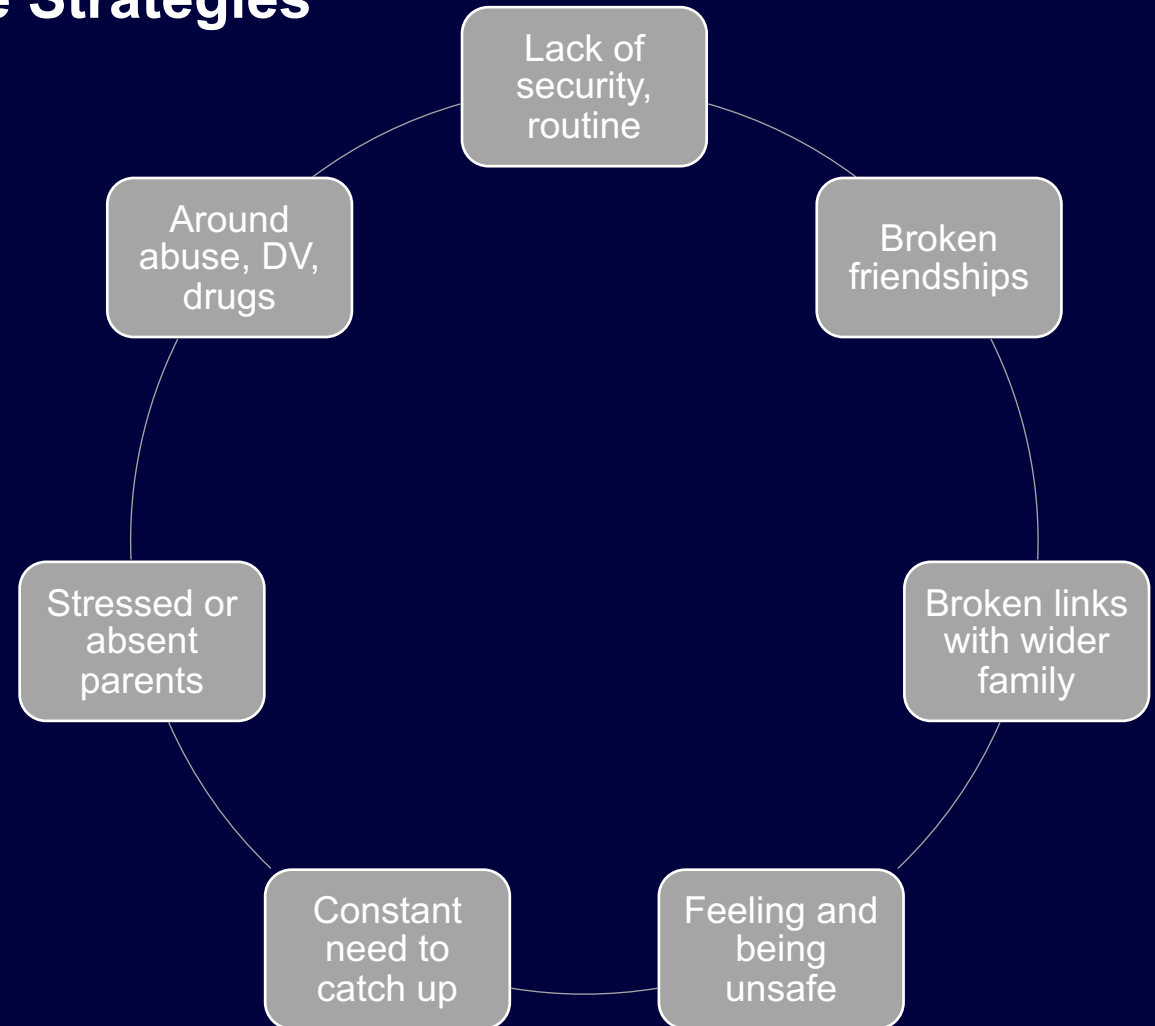


CHAMPIONS: Children in Homeless Accommodations Managing Pandemic Invisibility Or Non- inclusive Strategies

QUOTES FROM FAMILY WORKSHOPS:

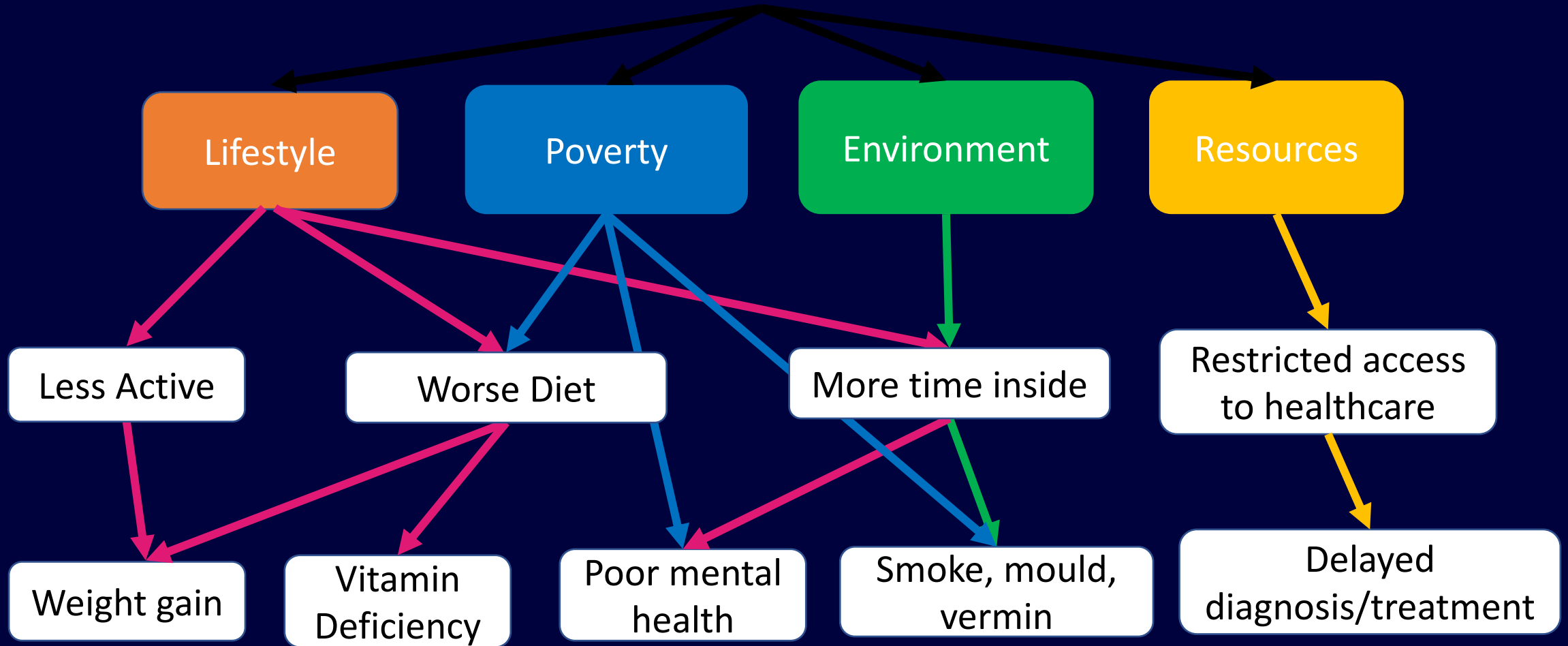
*“My child is actually naughty now. I don't know why, I think it's because of the other kids in here as well, like they're all on top of each other... he's not bonding with other children, he's not learning from other children, he's just playing by himself all day.”
(a single parent with a child aged 18 months)*

“[My children] wouldn't touch any food, even after washing, first a wash and then give to the kids. They're really scared at that time... five families and we're using one bathroom.” (a single parent with 3 children)



(CHAMPIONS Project Update Report, 2021)

Impact of pandemic on existing inequalities



IMPACT: CHILDREN 6-18 YRS

Save the Children **counselling hotline** in India calls spiked with cases of COVID-19 in spring 2021, with 7000% increase Mar to Apr 2021. (Farfield, 2022)

On average, students globally 8 mths **behind studies** due to pandemic. (Bryant et al., 2022)

80% of UK pupils said wearing a face covering made it difficult to communicate and 55% said learning more difficult. (GOV.UK 2021)

2022 study showed 40% of 11-17 year olds reported feeling **worried, sad, or unhappy**, irrespective of COVID-19 diagnosis. (Stephenson et al., 2022)



Video © Pixabay

HEALTH IMPACT AFTER 3 MONTHS: CHILDREN 11-18 YRS

In largest matched global CLoCK study, 13% had 5+ symptoms remaining for 30k 11-17 yr olds tested between Sep 2020 and Mar 2021. (Stephenson et al., 2022)

Another study of 23k children up to 18 yrs found that long COVID is commoner in female teenagers & those with pre-existing physical and mental health problems. (Behnood et al., 2021)

Other symptoms: cognitive difficulties (3%), sore throat (2%) and sore eyes (2%). The older the child, the higher the percentage. (Behnood et al., 2021)

Predictors of Long COVID are age, sex, ethnicity and pre-COVID-19 health and wellbeing

Headache, 23%

Loss of smell/taste, 21%

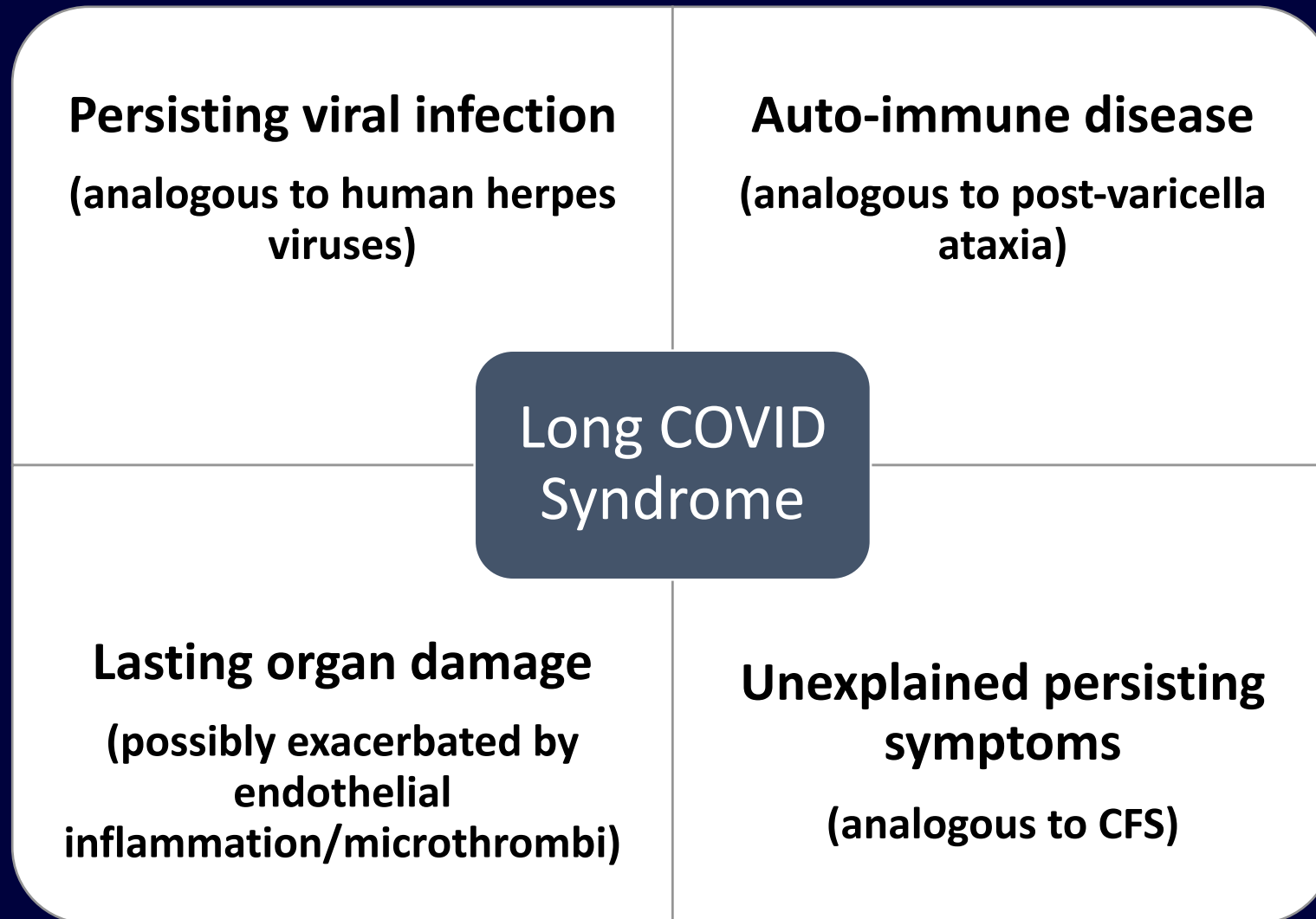
Dizziness, 14%

Unusual shortness of breath, 23%

Unusual tiredness, 39%



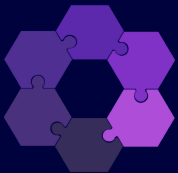
(Stephenson et al., 2022)



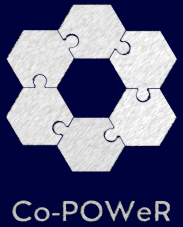
**CONVALESCENT STUDY
and 'deep phenotyping'**

The double impact of the pandemic on BAME young people's mental and emotional wellbeing: The effects of racial inequality and COVID-19

The Co-POWeR Academic Team



Co-POWeR: Consortium on Practices of Wellbeing & Resilience in Black, Asian & Minority Ethnic Families & Communities



1. Changes in family relationships

Workplace risks and loss of income

“a TFL worker...was spat on in...a racist attack by someone who had COVID...and then TFL were saying...they couldn't do anything about it....it kind of made me think of my parents, because that had happened to my parents, and they © [management] just wouldn't care about it...that kind of put me in, like, a bad kind of frame of mind. Because they [parents] would be out all the time. And I'd be at home just thinking, like, about their safety, or what could happen to them”

Disappointment and loss

Depletion of savings set aside to visit overseas family.

Sharing devices

“Badgering my mum to use her phone...”

(Co-POWeR Study, 2022)



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Family

Impact on relationships within the family

- Risks when family members go to work
- Relationships with immediate family members – positive (more quality time together) and negative (claustrophobic)
- Relationships with extended family, remote support
 - **Disappointment** of not being able to visit family abroad,
 - **Having to use money set aside for holidays** for subsistence due to job losses and people in precarious employment.
 - **loss of things that cannot be substituted by online calls** – ‘the smell of my grandmother’

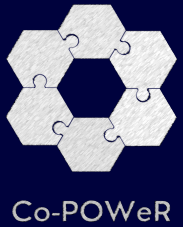
as time's gone on I have been feeling a bit anxious about my dad going out to work (P33)

So I think it has brought some positives. Like because now I have a more close relationship with my siblings (P9)

I think that was the most worried thing, I was, like, obviously for, like, my grandparents because they are, like, vulnerable people (P33)



Co-POWeR: Consortium on Practices of Wellbeing & Resilience in Black, Asian & Minority Ethnic Families & Communities



3. Changes in education

Impact of racism on teachers' grading

“..[the teacher] was like 'Can you lot separate because when I see a big group of you it give me anxiety, it scares me' And it was literally only black people there, I was like 'what!'”

Separation and isolation

”It was just very hard to get back into retaining information...I was quite alone for most of six months just doing nothing by myself, my mental health, kind of, receded quite a bit. So being around people was quite difficult as well“

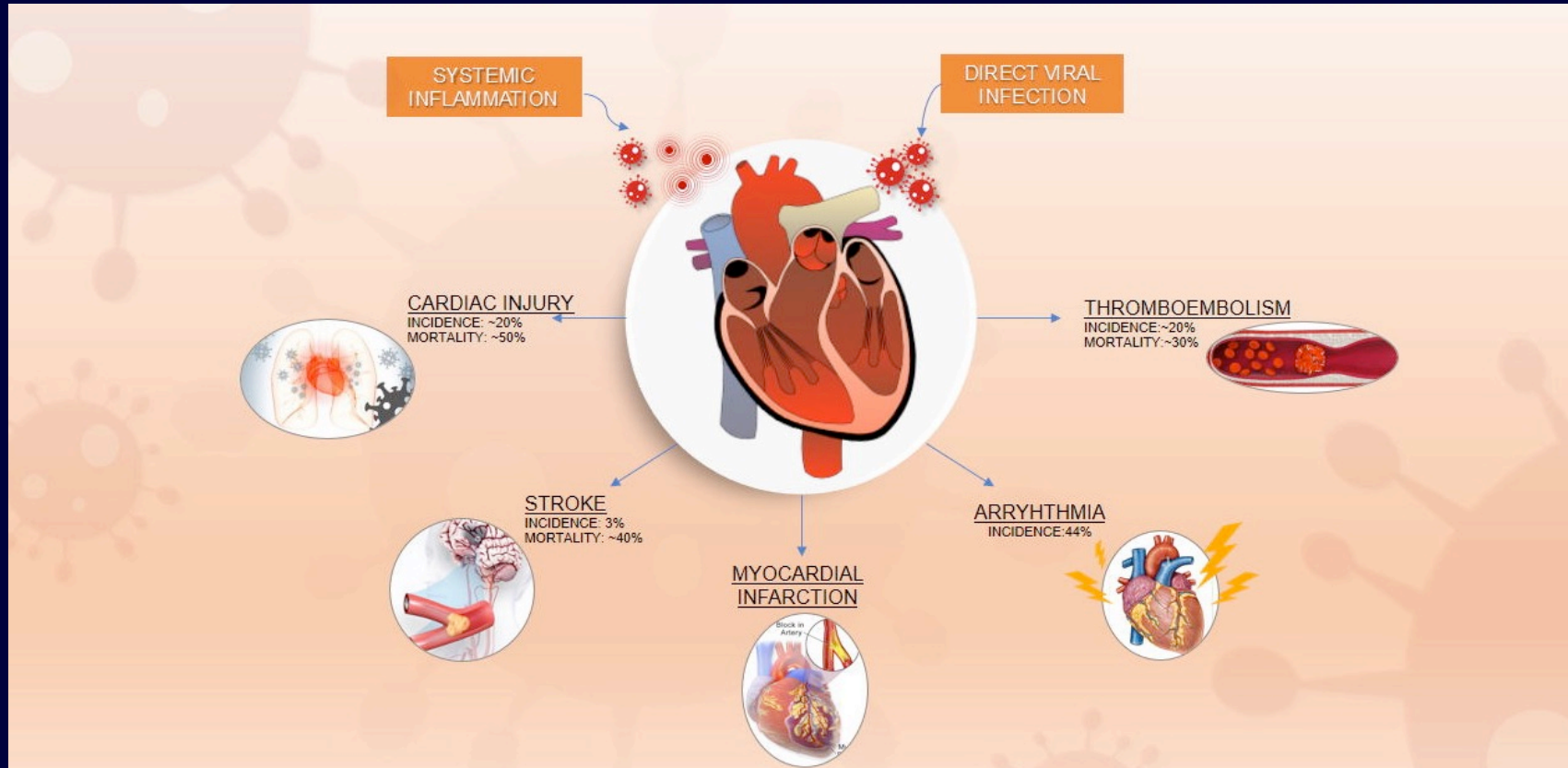


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(Co-POWeR Study, 2022)

MULTI-SYSTEM HEALTH IMPACT: ADULTS

Graph ©
Thakkar et
al., 2020



Though COVID-19 primarily affects the respiratory system, it has also been associated with a wide range of cardiovascular (CV) manifestations with extremely poor prognosis, such as direct myocardial infection and systemic inflammation resulting in cardiac injury, stroke, myocardial infarction, arrhythmia and thromboembolism.

(Thakkar et al., 2020)

IMPACT: ADULTS

Take them 3+ years to get back to where they were in 2020 in terms of recovering from the **economic impact** of the pandemic. (Menasce Horowitz, Brown & Minkin, 2021)

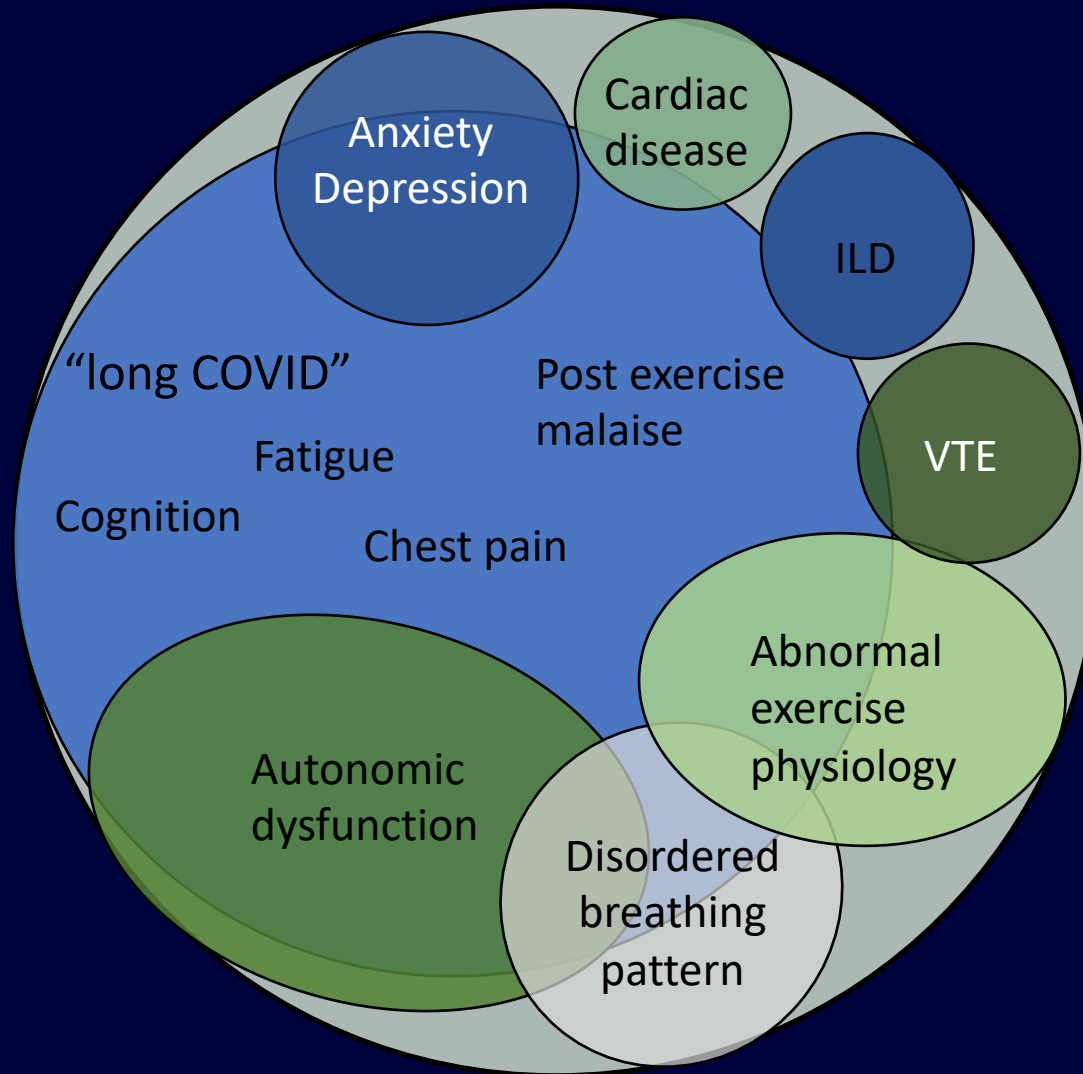
Relationships with family members had (sometimes/often) worsened. (Duby et al., 2022)

2022 study found that, as of 7 April 2022, 2.7% of UK population experiencing symptoms beyond 4 weeks, 70% beyond 12 weeks. (Subramanian et al., 2022)

UK study of COVID-19 related death and hospital admission in adults post-vaccination showed those with highest risk of hospital admission/death: Down's syndrome (12.7X) kidney transplantation (8X), sickle cell disease (7.7X), care home residency (4.1X), chemotherapy (4.3X). (Hippisley-Cox et al., 2021)



Spectrum of findings in post COVID syndrome:



Complicated clinical pictures:
Combination of end organ
damage and other
phenomena plus pre-existing
comorbidities exacerbated

MULTI-SYSTEM HEALTH IMPACT AFTER 30 DAYS: ADULTS

A faint, dark blue silhouette of a human figure stands in the background, centered behind the text. The figure is facing forward with arms slightly away from the body.

1/4 people who have had virus experience symptoms that continue for at least a month but 1/10 are still unwell after 12 weeks. (Rajan et al., 2021)

Associated with overlapping symptoms: generalized chest and muscle pain, fatigue, shortness of breath, and cognitive dysfunction, and mechanisms affecting multiple systems such as inflammation, thrombosis, and autoimmunity. (Rajan et al., 2021)

Women and health care workers seem to be at greater risk. (Rajan et al., 2021)

Long COVID serious impact on people's ability to go back to work / social life. (Rajan et al., 2021)

Risk predictors of long COVID: age ≥ 40 yrs, frailty, visit to A&E and hospital admission for COVID-19 symptoms. (Jones et al., 2021)

3.1% of UK population experiencing self-reported long COVID (symptoms continuing for more than 4 wks after infection that were not explained by something else) as of 31 July 2022. (Office for National Statistics, 2022)



An international group of leading diabetes researchers are establishing a Global Registry of COVID-19-related diabetes.

This registry is specifically designed to establish the extent and characteristics of new-onset, COVID-19-related diabetes, and to investigate its pathogenesis, management and outcomes. The Registry also collects data about presentations with severe metabolic disturbance in pre-existing diabetes (DKA, hyperosmolarity; severe insulin resistance).

<https://covidiab.e-dendrite.com/>

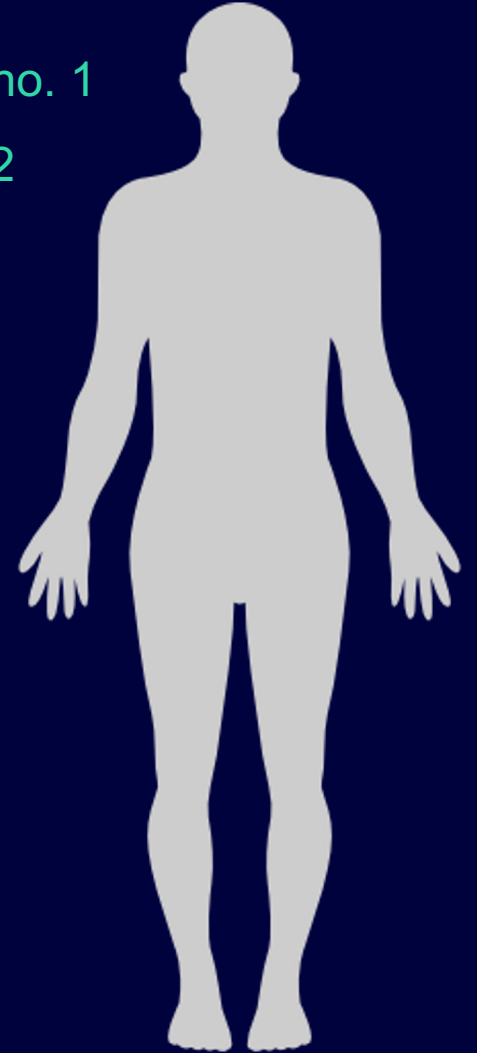
HEALTH IMPACT AFTER 42 DAYS: ADULTS

National Institute for Health and Care Excellence (NICE) long COVID definition:

- Symptoms 4-12 wks after infection; or
- Symptoms of COVID-19, and other symptoms that cannot be explained by alternative diagnosis, 12 wks + after infection.

(National Institute for Health and Care Excellence, 2022)

- Anosmia
(loss of sense of smell), no. 1
- Hair loss, no. 2
- Sneezing, no. 3
- Ejaculation difficulty, no. 4
- Reduced libido, no. 5
- Shortness of breath at rest, no. 6
- Fatigue, no. 7
- Pleuritic chest pain, no. 8
- Hoarse voice, no. 9
- Fever, no. 10



(Subramanian et al., 2022)

IMPACT: ELDERLY

- Increasing age strongly associated with COVID-19 death risk, 80 + yrs have 20X increased risk compared to 50–59-year-olds. ([Williamson et al., 2020](#))
- 2021 survey of 6 countries in Eastern Europe and Central Asia (Albania, Azerbaijan, Bosnia & Herzegovina, Georgia, Serbia and Kosovo) found that 18% of older people felt extremely lonely. ([UCL & UNFPA EECA, 2022](#))
- Low-tech e-healthcare (by phone) facilitated access to healthcare during COVID-19, but half of users in EU aged 50+ reported that it did not fully meet their needs. ([Eurofound, 2022](#))



UNEXPECTED POSITIVES FOR FAMILIES



Relationships



Mental health



Home-schooling

FAMILIES: UNEXPECTED POSITIVES

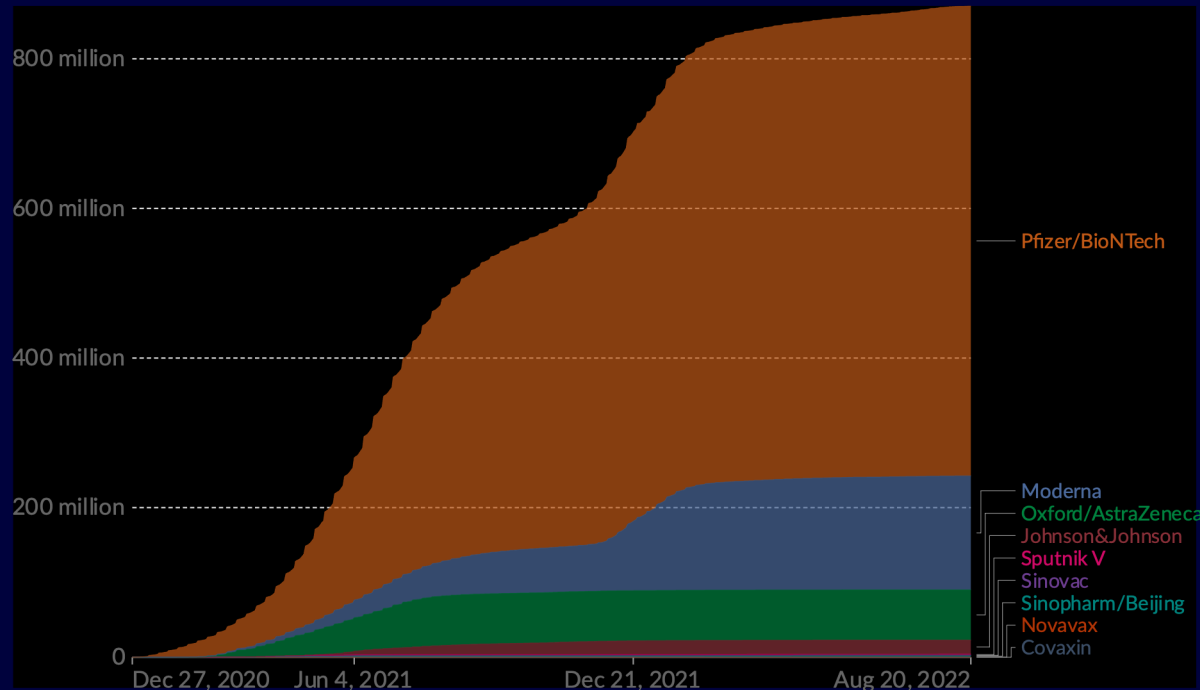
- More quality time with their partner, spend more time doing enjoyable things, more time in nature or the outdoors, and increase their physical activity. (Williams et al., 2021)
- Groups with higher levels of positive change were females, younger age groups, married or living with their partner, employed, and those reporting better health. (Williams et al., 2021)
- Adolescents in Swiss high schools -young people slept significantly longer and had less caffeine and alcohol use than before pandemic. (Albrecht et al., 2022)



PREVENTION AROUND THE WORLD: VACCINES

COVID-19 vaccine doses administered by manufacturer, European Union
All doses, including boosters, are counted individually

Our World
in Data



Source: Official data collated by Our World in Data

OurWorldInData.org/covid-vaccinations • CC BY

- As of 7 September 2022, 67.7% of the world population has received at least one dose of a COVID-19 vaccine.
- 12.61 billion doses have been administered globally, and 4.67 million are now administered each day.
- Only 21% of people in low-income countries have received at least one dose.
- Most popular vaccines in EU: Pfizer/BioNTech, Moderna and Oxford/AstraZeneca (in that order).

(Ritchie et al., 2022)

VACCINES AVAILABLE IN EU

*Pfizer/BioNTech
(10microgram &
30microgram
doses)*

Moderna

*Oxford/AstraZen
eca Johnson &
Johnson*

Sputnik V

Sinovac

Sinopharm/Beijin

g Novavax

Covaxin

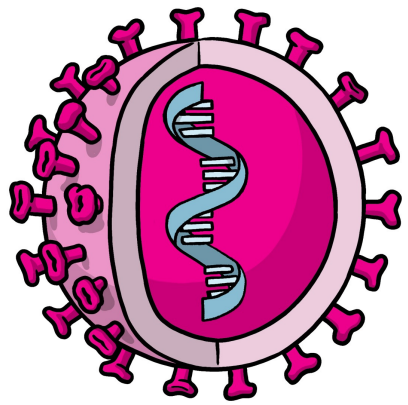
(Wright et al., 2022)

PREVENTION: CURRENT VACCINES

- 2022 study estimated vaccination prevented 14.4 m deaths globally in 1st yr of vaccination = global reduction of 79% of deaths. [\(Watson et al., 2022\)](#)
- Debate over vaccine effectiveness. 2021 ranking by reported efficacy gives relative risk reductions of 95% for Pfizer, 94% for Moderna, 91% for Sputnik V, 67% for J&J and 67% for AstraZeneca vaccines. [\(Olliaro, Torreele & Vaillant, 2021\)](#)
- 2021 US study of 9667 hospital admissions for severe COVID-19 between April 1 2021 and Oct 26 2021 found that vaccine effectiveness declined over time, from 94% at days 50-100 after vaccination to 80.4% by days 200–250 after vaccination. The risk of severe breakthrough infection despite vaccination was most strongly associated with 80+ years of age, vaccine type, time since vaccination and comorbidities including organ transplantation, cancer and immunodeficiency. [\(Wright et al., 2022\)](#)
- Vaccine effectiveness for risk reduction for long COVID varies with dosage. 1st dose associated with initial 12.8% decrease for long COVID, 2nd with initial 8.8% decrease, with subsequent decrease by 0.8% per week. [\(Ayoubkhani et al., 2022\)](#)

PREVENTION: CURRENT VACCINES

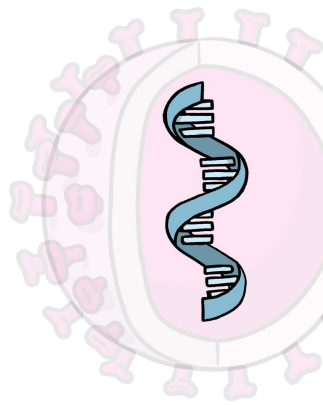
There are three main approaches to making a vaccine:



Using a whole virus
or bacterium



Parts that trigger
the immune system



Just the
genetic material

3 main approaches to designing vaccines:

1. Whether they use a whole virus or bacterium;
2. Just the parts of the germ that triggers the immune system;
3. Just the genetic material that provides the instructions for making specific proteins and not the whole virus.

PREVENTION: VACCINES IN THE FUTURE

Manufacturers such as Pfizer/BioNTech, Moderna and AstraZeneca modifying vaccines for further variants and easier administration/transportation.

Challenges include: maintaining finances, running trials, ensuring efficient and transparent authorisation and monitoring effectiveness.

Pfizer/BioNTech and Moderna have started clinical-trials for Omicron-specific vaccines.

Current COVID-19 vaccines injected in the muscle and generate antibodies that circulate mainly in the blood - administration route is not optimised to generate antibodies in the airways, which are the entry point.

Mucosal vaccines (either intranasal or oral) have potential to trigger a robust immune response at entry site - WHO's vaccine tracker says 8 intranasal COVID-19 vaccines in clinical trials, incl. University of Oxford/AstraZeneca vaccine.

Other administration routes being explored: oral vaccines, skin-patch.

(Vagnoni, 2022)

TREATMENT AROUND THE WORLD: COMMON

COMMON TREATMENTS

*Respiratory
support
Antiviral
medicine*

Non-invasive respiratory support alleviates respiratory distress, improves oxygenation, and reduces need for invasive mechanical ventilation in critically-ill patients. Side-effects: delay tracheal intubation and increase in patient self-inflicted lung injury. (Zampieri & Ferreira, 2022)
Evidence on respiratory support mixed

Molnupiravir is an antiviral medicine that works by stopping coronavirus from growing and spreading.
Early as possible after infection- prevent more severe symptoms developing.
Non-severe patients at highest risk of hospitalization, although possible risks for young and healthy patients, including children, and pregnant and breastfeeding women. (BMJ, 2020)
Reduces risk of hospital admission (43 fewer admissions per 1,000 patients at highest risk) and time to symptom resolution (average 3.4 fewer days). (BMJ, 2020)

2020 global studies found that both antiviral medicine remdesivir and convalescent plasma were associated with improved outcomes for hospitalized COVID-19 patients. (Kim, An, Kim & Hwang, 2020)

(National Institute for Health &
Care Excellence, 2022)
(Kanja & Bunn, 2022)

TREATMENT: COMMON

COMMON TREATMENTS

Monoclonal antibody therapy

*(National Institute for Health & Care Excellence, 2022)
(Kanja & Bunn, 2022)*

Monoclonal antibodies (nMAb) can manage symptoms and reduce risk of becoming seriously ill by targeting viral spike protein, which prevents viral entry, esp. for those with low immunity. (NHS, 2022) (Brobst & Borger, 2022) (BMJ, 2021)

Study found monoclonal antibodies reduce risk of disease progression among high-risk patients with mild-to-moderate symptoms. (Gupta et al., 2021)

2021 monoclonal antibody treatment AZD7442/Evusheld, combo of 2 long acting antibodies (LAABs) tixagevimab and cilgavimab, found to reduce risk of developing symptomatic COVID-19 by 83% vs. placebo when taken as preventive measure with low immunity. When used within 3 days, reduced risk of severe COVID-19 or death by 88% (Mahase, 2021) EU has not purchased doses for bloc, Germany, France and Spain bought directly from AstraZeneca. (Collis, 2022)

TREATMENT AROUND THE WORLD: EMERGING

EMERGING TREATMENTS

*Systemic
corticosteroid
therapy
Convalescent
plasma*

*(National Institute for
Health & Care Excellence,
2022)
(Kanja & Bunn, 2022)*

- Systemic corticosteroid therapy reduces mortality in hospitalized patients with COVID-19 who require supplemental oxygen by mitigating systemic inflammatory response that can lead to lung injury and multisystem organ dysfunction. (National Institutes of Health, 2022)
- Convalescent plasma contains antibodies from patients who have recovered. High-titre convalescent plasma (i.e., plasma with high antibody titres) granted emergency-use only authorisation in the US for treatment of hospitalised patients early in the disease course & low-immunity patients. (US Food & Drug Administration, 2021) Side effects: severe allergic reactions, anaphylaxis and phlebitis. (Nagoba et al., 2020) Current evidence shows no significant improvement in survival and other important measures so WHO advises against use. (BMJ, 2021)

TREATMENT: EMERGING

EMERGING TREATMENTS

*Antiparasitic
drugs*

*Serine
protease
inhibitors*

*Mesenchymal
stem cell
therapy*

Ivermectin approved for human use to treat infections from parasitic worms, head lice and skin conditions like rosacea. Not officially authorized for use in preventing or treating COVID-19 yet.

US FDA received reports of patients hospitalized after self-medicating with ivermectin intended for livestock. ([US Food & Drug Administration, 2021](#))

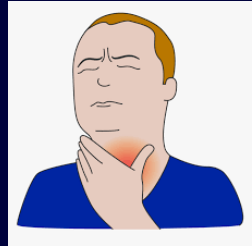
Serine protease inhibitors thought to be effective in inhibiting inflammation, coagulopathies and multiple organ failure from COVID-19. ([Sagawa, Inoue & Takano, 2020](#))

Effective in blocking entry of COVID-19 in vitro to upper respiratory tract and lungs. ([Hoffmann et al., 2020](#))

Mesenchymal stem cells, including those from human umbilical cords, are thought to reduce pathological changes that occur in the lung and inhibit the cell-mediated immune inflammatory response.)

([National Institute for Health & Care Excellence, 2022](#))
([Kanja & Bunn, 2022](#))

Home remedies used during covid -19 - India



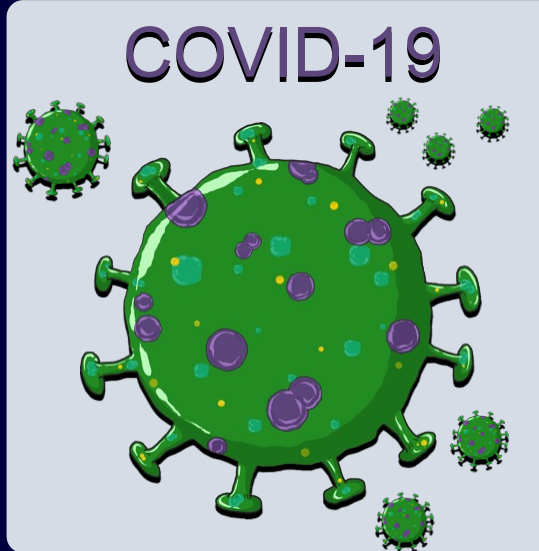
Sore Throat

1 Covid patients takes Steam inhalation with Ajwain and Pudina (Mentha spicata) and Vicks which gives instant relief in breathing .



Cough & Cold

1. Gargle and Drink with Luke warm water, ginger, turmeric, Tulsi, Neem, Giloye Mulethi, Cardmom, Clove will help in the relief from Cough, sneeze & Cold.
2. People were using warm water or boiled with herbs like ginger (Zingiber officinale) or coriander (Coriandrum sativum) or basil (Ocimum sanctum / Ocimum basilicum), or cumin (Cuminum cyminum) seeds etc., for drinking purpose.



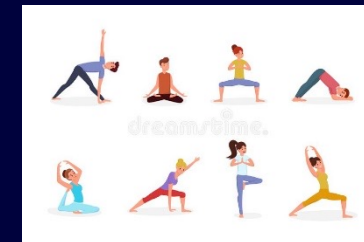
3 For Immunity Booster people used to drink Warm Milk with Turmeric



Immunity Booster Drink

4

People also performed Yoga and moderate exercises for Primary Prevention of COVID-19 in their daily routine.



Yoga & Exercise

6

People most commonly consumed kada (Ayurveda) this drink help to boost immunity of covid patient also help them to get relief in coughing and drink coconut water.



5

People commonly performed Nasal instillation/application of medicated oil (Anu taila or Shadbindu Taila) or plain oil (Sesame or Coconut) or nasal application of cow's ghee



Nose Block & Nausea

CASE STORY



TITLE -MIRACLE
WATER , BANSWARA,
INDIA

This is case story of Banswara tribal district of Rajasthan. In the tribal community have more faith on religious leaders. They believe that *baba* has developed a miracle water whoever will drink that water that person will not get infected from the virus and no need to follow any guideline like mask, social distancing etc.

POLICY RECOMMENDATIONS: ADDRESSING HEALTH IMPACTS



- **Leverage the current response to strengthen both pandemic preparedness and health systems.**
- **Invest in essential public health functions including those needed for all-hazards emergency risk management.**
- **Increase domestic and global investment in health system foundations and all-hazards emergency risk management. (WHO, 2021)**
- **Need for multidisciplinary, multispecialty approaches to assessment and management focused on reducing long COVID impacts;**
- **Action to tackle the wider consequences of long COVID, including attention to employment rights, sick pay policies, and access to benefit and disability benefit packages;**
- **Implementing well-functioning patient registers and other surveillance systems; creating cohorts of patients; and following up those affected as a means to support the research which is so critical to understanding and treating long COVID. (Rajan et al., 2021)**

POLICY RECOMMENDATIONS: ADDRESSING HEALTHCARE INEQUALITIES FOR BAME

1. Recognise institutional racism exists in social care and health services..
2. Recognise importance of the work of both paid and unpaid carers.
3. Reintroduce face-to-face GP appointments
4. To enhance trust in public authorities, the police should not have any role in enforcement or monitoring of compliance with public health law and guidance, which should be developed through consultation with people of all ages across disadvantages and vulnerable and communities and translated into relevant community languages as they appear.
5. Long-term investment in local youth services, specific to the needs of local communities, are required to provide non-judgmental safe spaces.

(Solanke et al., 2022)



Covid Memories

I cry and cry all through the night
For those who've gone away
To meet the rest of those that died
And then were washed away

The tears just keep falling
My heart it breaks apart
To think of those whose lives were lost
And families torn apart

They tried to feed their children
And had to go to work
Why could they not protect themselves
From the terrors of this world

I pray for you my darlings,
It's dark and I'm alone
There's silence all around me
But your stories must still be told

Monica Lakhanpaul

Q & A

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