



University  
of Glasgow

School of Health  
& Wellbeing



# BIENNIAL REPORT 2021 & 2022



# Foreword

We have recently moved into our brand-new home: the Clarice Pears Building. Staff and students, previously dispersed over ten sites, are now co-located in a building designed to embody our values and beliefs and support our research and teaching aspirations. The ground floor is publicly accessible and includes exhibition and knowledge exchange space, a Community Hub to support our partnership work, and a café selling healthy, sustainable food. Use of natural materials, such as wood and plants, and natural light and ventilation provide an environment that promotes the wellbeing of occupants and visitors. Inclusivity and diversity are core values, so all work and social spaces are physically accessible, we provide adult as well as baby changing facilities, and a faith room. Active commuting is encouraged through the provision of showers and drying cabinets. A variety of teaching spaces with flexible layouts and state of the art audio-visual equipment will greatly improve the experience of our students.

As part of the restructuring of the College of Medical, Veterinary and Life Sciences, all Institutes have been rebranded as Schools. This reflects the equal priority given to teaching and research and the need for each to inform the other. The COVID-19 pandemic impacted the life and work of staff and students. I am grateful to both for their perseverance and flexibility in developing and applying new ways of working and studying. The experience has provided some benefits in making us better equipped to incorporate new ways of working into the existing options available including on-campus, hybrid and flexible working for staff and on-campus, online distance and blended learning for students.

Settling into our new building coincides with several important anniversaries - 100 years of academic public health in Glasgow, 50 years of academic general practice, and 10 years of our HAWKEYE newsletter. These provide an ideal opportunity to reflect and build on historical successes as we start our new chapter.

Jill Pell

Head of the School of Health and Wellbeing



# The FIELD Study: Football's Influence on Lifelong health and Dementia risk

Jill Pell, Danny Mackay and Willie Stewart

The FIELD Study was led by the University of Glasgow and conducted in partnership with the Football Association and Professional Footballers' Association. This study linked routine health data on 7,676 former professional football players and 23,028 controls from the general population matched by age, sex and deprivation. These data provided over 18 years of follow-up information on medication use, hospital admissions and deaths.



The study showed that, whilst former football players were healthier than the general public in most regards – for example, less likely to die from heart disease and lung cancer - they were 3.5 times more likely to die from neurodegenerative disease and 5.0 times more likely to develop Alzheimer's disease. The increased risk was specific to outfield players, rather than goalkeepers, strengthening the evidence that repeatedly heading the ball was the likely cause.

The FIELD study attracted substantial media coverage and led directly to important changes in policy aimed at reducing the risk of brain injury.

- Three national football associations (England, Scotland and Northern Ireland) and the grassroots youth football organisation in Scotland either banned or restricted children from heading balls in training, depending on their age.
- New guidance came into force on heading during training for both professional and adult amateur footballers in England.
- The FA announced that a heading ban for players aged 12 years or younger would be trialled in England.
- The Scottish Football Association banned professional footballers playing in Scotland from heading the ball during training on both the day before and the day after a match.
- A UK Parliament inquiry on Concussion in Sport made recommendations requiring action from the UK Government, the Health and Safety Executive, NHS England, UK Sport, National Governing Bodies (e.g. the Football Association), and the Faculty of Exercise and Sport Medicine.
- The Department for Digital, Culture, Media and Sport appointed a Ministerial Advisor for concussion in sport.
- The rule-making body for football internationally is running trials of permanent substitutions for professional footballers who experience actual or suspected concussion during a match.

# 'This is Me' campaign: valuing the lives of people with learning disabilities

Deborah Cairns and Fiona Barlow



With support from the Glasgow Knowledge Exchange Fund, this campaign is challenging the stigma, discrimination and inequalities experienced by people with learning disabilities.

The Scottish Learning Disabilities Observatory collaborated with people with learning disabilities, their families, and third sector organisations to increase public awareness of the experiences of people with learning disabilities. Through a targeted social media campaign, we aim to challenge stigma and discrimination and influence positive change. We are working with the Scottish Commission for People with Learning Disabilities, PAMIS (Promoting a More Inclusive Society) and Down Syndrome Scotland to raise awareness of the experiences of people with learning disabilities and their carers.

People with learning disabilities are, first and foremost, citizens with rights, needs, hopes, dreams and goals. Yet people with learning disabilities are not valued as equals in society and continue to experience stigma and discrimination across all areas of life which is evidenced through huge health and social inequalities. This includes lower life expectancy, poorer health care, limited employment and educational opportunities and higher rates of hate crime and bullying.

Research evidence from the Scottish Learning Disabilities Observatory in the School of Health and Wellbeing shows that discrimination, hate crime, bullying, and violence towards people with learning disabilities is occurring at a significant level.

By sharing eight stories of people with learning disabilities and family carers along with current research evidence about the health and wellbeing of people with learning disabilities, we hope to challenge the negative attitudes which are common in society. The eight short films have been shared via a coordinated social media campaign which we launched in May 2022, using the hashtag #ThisIsMe22. Within a few months, our hashtag had been used more than 1,500 times and achieved 3,246,370 impressions on Twitter. Our stories were viewed over 13,500 times on Facebook and 1,400 times on YouTube, and our 'This Is Me' webpage was visited more than 1,300 times. 'This Is Me' also received high profile coverage on STV news in May 2022 and was the impetus for a BBC programme aired in August 2022 highlighting the significant health inequalities experienced by people with learning disabilities.

For further information:

[www.gla.ac.uk/schools/healthwellbeing/news/headline\\_851377\\_en.html](http://www.gla.ac.uk/schools/healthwellbeing/news/headline_851377_en.html)

# The Scottish Veterans Health Research Group

Beverly Bergman

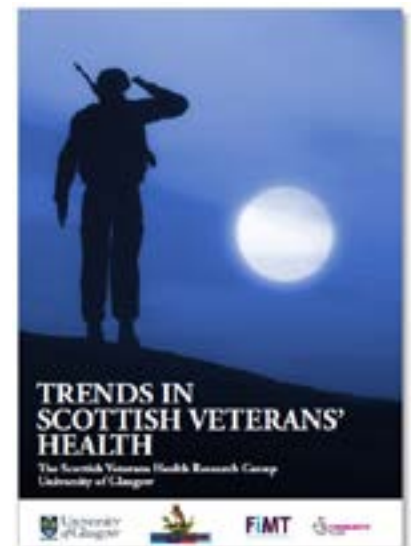
The Scottish Veterans Health Research Group was established within the School of Health and Wellbeing in 2018 to provide an evidence base for policymakers and service providers supporting the health and welfare needs of military veterans. The Group's logo symbolises knowledge and wisdom (the owl) vanquishing the 'snake in the grass' of myth and misunderstanding about the health impact of military service.



The Group is led by Beverly Bergman, a military veteran herself and former Army doctor who works closely with the Scottish and UK Governments, veterans' charities and other veterans research groups.

An extensive research programme has been conducted based on a retrospective cohort study of 78,000 veterans in Scotland, matched to 253,000 non-veterans, to explore their long-term health, which supersedes a smaller previous cohort covering 2012-2015. Recent publications have included papers on:

- Type 2 diabetes
- Dementia
- Cardiovascular disease
- Suicide
- Lower limb amputation
- Lower limb osteoarthritis
- Mental health of junior entrants to the Armed Forces



On 25 October 2022, we published a major new report, **Trends in Scottish Veterans Health**, funded by Forces in Mind Trust.



## Extract from the Foreword by the Cabinet Secretary for Justice and Veterans

“The Scottish Government is committed to ensuring that veterans who live in Scotland, together with their families, are able to access the best possible care and support, including safe, effective and person-centred healthcare. Research such as this updated report on Trends in Scottish Veterans' Health plays an important part in helping this aim be realised.”

Keith Brown MSP

# NIHR Global Health Research Unit on Social and Environmental Determinants of Health Inequalities

Alastair Leyland, Peter Craig, Ruth Dundas, Vittal Katikireddi, Sara Macdonald, Jonathan Olsen



Brazil and Ecuador are Latin American countries that show marked inequalities in health. Although there are many potential causes of health differences between different social groups, it is reasonable to assume that these are largely due to the social determinants of health – the conditions in which people are born, grow, work, live, age and die. At the same time, there are many environmental factors that can impact individual and population health, including the built environment and climate change. Such environmental considerations tend to have the most harmful impacts on the most deprived in society.

In an attempt to reduce the impact of social conditions such as poverty, governments sometimes have introduced policies such as providing small cash payments to or building houses for the very poor. Similarly, in an attempt to protect the environment and to mitigate their harmful effects on the conditions in which people live, governments may introduce environmental policies. While such policies do not tend to have health improvement as the primary target, they may still have a notable influence on health. We are working to discover whether these policies, when implemented, had any impact on health, whether they had a bigger impact on disadvantaged groups (defined by income, ethnicity, sex, geography, migrant status and deprivation), and the extent to which the health impacts have been modified by the provision and organisation of health services, particularly regarding coverage, access and quality.



Our research is funded from 2022 to 2027 and over this time we plan to lead globally, with particular reference to Latin America, in terms of using the full potential of existing databases by combining them to find out whether social and environmental policies have had an impact on health and health inequalities, and the extent to which these can be affected by health service provision.

This Unit builds on our work as an NIHR Global Health Research Group on Social Policy and Health Inequalities. This Group had the goal of improving population health in Brazil by studying the social determinants of health and improving our understanding of how to reduce inequalities in low and middle income countries. Our successes to date include the creation of the Brazilian Index of Deprivation (Índice Brasileiro de Privação – IBP). Brazilian colleagues have produced a short video describing the ambitions of this Unit.



# SHINE – The Schools Health and Wellbeing Improvement Research Network – Focusing on improving mental health in young people

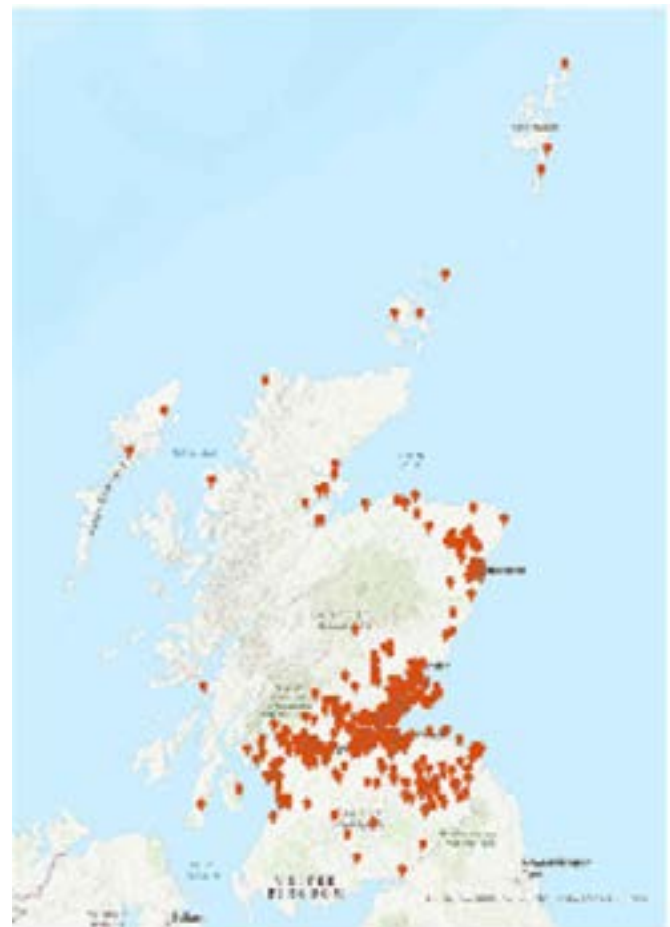
Jo Inchley, Laurence Moore, Judith Brown, Stephanie Chambers, Dawn Haughton, Judith Mabelis, Mary Wilson

Pupil health and academic attainment are intertwined. Healthier pupils have higher attainment and, in the longer term, those who achieve better educational outcomes have better health and wellbeing. Adolescence is a critical period for young people's health and wellbeing. About three quarters of all psychiatric disorders begin before age 18 years but mental health research during childhood and adolescence has been relatively neglected.

The aim of SHINE is to help transform health and wellbeing outcomes for young people in Scotland through high quality, school-based health improvement research and data-driven innovation through a collaboration between schools, researchers and policy-makers.



Established in 2018, SHINE has a current membership of 613 schools (representing a quarter of the Scottish school-aged population, 255,011 young people across all levels and socio-demographic backgrounds). SHINE builds on the WHO-collaborative Health Behaviour in School-aged Children study and launched its own online pupil mental health survey in 2020 which provide data to help schools address their health and wellbeing



priority needs and actions. Nationally, over 80,000 responses have been collected so far, which will facilitate high-quality research in this important area. The SHINE online mental health survey has been highlighted to schools as a resource to use as an additional assessment of pupil health and wellbeing in the recently published Scottish Government 'Whole School Approach to Mental Health Framework' for schools to support children and young people's mental health and wellbeing.





Member schools receive free personalised school-level health and wellbeing data reports focusing on key issues affecting young people including mental health, social media use, bullying, healthy eating and sleep, as well as relationships with family/friends and school experience. The reports are shared across all stakeholders in the school community, with young people's voice at the centre of the decision-making systems.

The reports not only allow individual schools to respond to the issues and provide support which is most relevant to their wellbeing context, the SHINE programme also supports staff in participating schools, providing academic expertise in areas related to mental health and wellbeing via its webinar series (e.g. suicide and self-harm, attachment difficulties) and annual SHINE networking conference. SHINE supports high quality research which has a clear benefit for participating schools (e.g. SCRAMS Sleep, circadian rhythms and

mental health in schools; TeenCovidLife; MoodHwb a digital programme for adolescent depression; CLOCK OFF reducing night-time use of interactive electronic devices and social media).

SHINE aim to bring researchers and practitioners closer together, provide local level data to schools to catalyse engagement and promote positive health and educational outcomes for students in schools across Scotland.

# MatCHNet - the Maternal and Child Health Network

Ruth Dundas, Emma Stewart, Anna Pearce, Alastair Leyland, Andy Baxter, Ronan McCabe

The Maternal and Child Health Network aims to lay the foundations to evaluate social policies that may affect maternal and child health, using administrative data and natural experimental evaluation methods.



## Evaluating Policies in the Early Years

The health and wellbeing of our children is a barometer for any nation's success. Health inequalities emerge from early in life, this is of particular concern because these inequalities track across the life course, and from one generation to the next, producing avoidable economic and social costs.

The early years are now widely accepted to be the most effective period in the life course to intervene to reduce inequalities and improve life chances. Upstream policies, i.e. those which strive to tackle the social determinants of health, are thought to hold most potential to improve many health outcomes including those relating to pregnancy and early childhood. Randomised controlled trials are not an appropriate study design for evaluating upstream policies, which can rarely be randomised to some groups and not others (due to ethical implications and political or time restraints, for example).

Since new policies are usually implemented across entire populations, intervention-free comparison groups common in randomised controlled trials may be difficult to identify but can include populations in similar countries who were not exposed to these policy changes. Administrative data, coupled with policy variations across the UK, offer a promising yet under-utilised opportunity to evaluate the impacts of policies on child and maternal health. MatCHNet – the Maternal and Child Health Network – strives to address this gap.

We have produced a range of research, policy briefings and webinars highlighting the importance of evaluating policies in the early years. We have also produced methods resources that showcase natural experiment methods in the early years.

In this short video, Ruth Dundas discusses how to effectively use data systems to improve maternal and child health inequalities.



[www.youtube.com/watch?v=SVg5A2jv1\\_A](https://www.youtube.com/watch?v=SVg5A2jv1_A)

**Case study 1:**

Dr Andy Baxter led the evaluation of the English Teenage Pregnancy Strategy, which launched in England in 1999 with a 10-year goal of halving teenage pregnancy rates. Despite initial indications it was successful in reducing England's teenage pregnancy rates, similar changes were seen across several countries. This suggests falling rates would have occurred in the absence of the strategy.

**Case study 2:**

Dr Ronan McCabe led the evaluation of the Finnish Maternity Grant (which includes the Finnish Baby Box). We evaluated the impact on infant mortality rates at the points of introduction (disadvantaged mothers only) in 1938 and universalisation in 1949. While we observed changes in infant mortality rates associated with both introduction and universalisation, these changes cannot be disentangled from the impact of the Second World War or other relevant infant mortality policy developments. Consequently, the relationship between the Finnish Baby Box or comparable contemporary interventions and infant mortality remains unclear.

# The SPACES study

Paul McCrorie, Avril Johnstone, and Rich Mitchell

SPACES is a Scotland-wide, long-term, research study exploring how young people use, experience, and move within their environments. This learning can inform how our built, natural, and social environments can be leveraged to improve health and well-being and reduce socioeconomic inequalities in children, young people, and beyond.



The SPACES project started in 2015/2016 and collected data on young people aged 10/11 years old from the Growing Up in Scotland (GUS) longitudinal cohort study. A follow-up data collection of the same young people, now aged 17/18 years old, is ongoing. At both timepoints, the young people were asked to wear a GPS device and activity monitor for 8 days. Individual linkage to 11 sweeps of GUS data across 17 years enables richer exploration of the longitudinal place-based effects on socioeconomic health inequalities in young people.

## Impact to date:

- The SPACES project has amassed over 15 journal article publications, invited presentations at national and international conferences, knowledge exchange events, and public engagement opportunities, with many having received substantial print and radio media coverage. The project has created a large network of collaborations spreading Europe, Hong Kong, and Australia.
- Academic impact extends to the SPACES data being shared and used by researchers at other Universities, both nationally and internationally.
- Under the Open Science framework, summary level physical activity data is currently being deposited, alongside GUS sweep 8, in the UK Data Service (UKDS) repository.
- SPACES data informed the updated UK Chief Medical Officers Physical Activity Guidelines in 2018
- SPACES data has provided evidence for Scotland's National Performance Framework, including indicators to measure progress against the National Outcomes (e.g. children and young people, sustainable places, impact on environment,), and Active Scotland Outcomes (e.g. encouraging the inactive to be more active; and improving our active infrastructure).



- SPACES data on young people's exposure to tobacco outlets has been discussed at National and International Parliamentary debates and cited in international policy documentation.
- SPACES data on walkability and active travel has been cited in a Scottish government review publication on air pollution and active travel.
- SPACES received additional funding from the University of Glasgow's Knowledge exchange funds in 2019 and 2022. This enabled us to co-produce a research-policy-agenda with over 100 stakeholders across multiple sectors, and a range of innovative engagement and dissemination resources to promote sustainable knowledge exchange.



# Loneliness and Wellbeing among Adolescents and Young Adults

Emily Long, Claire Goodfellow, Joanna Inchley, Alastair Leyland, Sharon Simpson, Jelena Milicev, Jose Marquez



Loneliness is increasingly recognised as a serious public health concern within the UK. Although it has traditionally been considered a problem amongst older adults, research has shown that young people may be particularly likely to experience loneliness. While we know that loneliness is harmful to the mental and physical health of people of all ages, and that young people report the highest levels of loneliness, little is known about the factors underpinning this vulnerability.

To help address the evidence gap and better support adolescent mental health this project, led by Dr Emily Long, aimed to contribute to the collective understanding around loneliness and wellbeing in young people. Using multiple sources of secondary data, including Understanding Society, the Health Behaviour in School-aged Children Study, and the Community Life Survey, our research explored risk factors for adolescents aged 11-15 years and young adults aged 16-24 years.

In conjunction with project partners, The Campaign to End Loneliness, and the What Works Centre for Wellbeing we published four papers investigating various aspects of youth loneliness and wellbeing. In these we explored:

- Geographic variation and social ecological influences on youth loneliness.
- The relationship between youth loneliness and personal wellbeing.
- The role schools play in the relationship between youth loneliness and mental health.
- The associations between loneliness, life satisfaction and wellbeing before and during the COVID-19 pandemic.

At an individual level, we found that risk factors for increased youth loneliness included but were not limited to: poorer self-rated health, being White British, and being of minority sexual orientation. Lack of supportive social relationships (e.g., fewer close friends or friends of a similar age), and a poorer perception of their community (e.g., poorer perceived neighbourhood quality and a decreased sense of belonging) were associated with increased loneliness.



While loneliness was always associated with poorer mental health and wellbeing, we did identify some protective factors. Amongst the loneliest young people, those who chatted with neighbours more frequently, or reported having someone they could count on, showed higher levels of wellbeing than equally lonely peers.

In relation to schools, we demonstrated that among lonely young people, the school they attended had a greater impact on their mental health, and that the negative impact of loneliness on mental health was stronger in schools where mental health was already low on average.

Finally, we found that loneliness, life satisfaction and psychological distress deteriorated minimally between April and November 2020, as compared to pre-pandemic levels. Additionally, loneliness, life satisfaction and psychological distress were significantly associated with each other, suggesting the interventions to tackle any of these outcomes would have beneficial effects on the others.

Findings from the project have been shared in multiple blog posts at the What Works Centre for Wellbeing, a press release from the British Psychological Society, at international conferences, and an upcoming podcast. We have also been cited in UK and Scottish Government evidence reviews. A whole project report will be published by the What Works Centre for Wellbeing in spring 2023.

# selfBACK – empowering people to manage their low back pain

Barbara Nicholl and Frances Mair

Low back pain has a major impact on the quality of life of the people affected, and a wider societal impact due to health care costs and working days lost. Low back pain is difficult to treat. Managing your own low back pain is recommended by health care professionals but it is difficult to do. We developed the selfBACK app to help people manage their low back pain. selfBACK was funded by the EU's



Horizon 2020 programme and was a collaboration with academic and industry colleagues in Norway, Denmark, the Netherlands, and Aberdeen. Artificial intelligence methods and behavioural change techniques were used to underpin the content and structure of the app, which was then tested in a randomised controlled trial.



Like most health conditions, one size does not fit all for low back pain management. selfBACK was designed to be tailored to individual users and their personal experience of low back pain. The app centres around three pillars of support: physical activity (step count), exercise (core and strength exercises) and education (for example,

messages about pain, mood and sleep). Users are given goals each week based on their current pain level and mood, and the selfBACK system suggests a weekly plan. The app monitors and interacts with the user to let them know if they are achieving their weekly goals. In the randomised controlled trial, which involved 461 participants, we compared the intervention group (selfBACK app and usual care) with a control group (usual care only) over a 3-month period and found that there was an improvement in pain-related disability in the intervention group. Further analysis suggests that the app is also useful for people with additional long-term conditions and for those with low mood or stress.



selfBACK is currently being rolled out in a pilot in NHS England in connection with Keele University and, in Denmark, via chiropractors and a health insurance company. We are exploring options to pilot the app within NHS Scotland, with a view to it being the first line of help to people with low back pain, as well as being available to those on a waiting list for further health professional input.

For further information: <http://www.selfback.eu/>







# How has minimum unit pricing affected alcohol sales in Scotland?

Jim Lewsey and Daniel Mackay

In May 2018, the Scottish Government introduced minimum unit pricing (MUP) making it illegal to sell alcohol for less than 50p per unit.

Our research showed that, in the year following the introduction of MUP in Scotland, the average price per unit of off-trade alcohol sales (i.e. sales in supermarkets, off-licences, and shops) rose 5 pence. Over the same period, the volume of off-trade alcohol sales fell by almost 4%; from 7.4 to 7.1 litres per head. Sales fell by 18.6% for cider, 3.8% for spirits and 1.1% for beer.

Over the same period in England and Wales - where MUP was not introduced - alcohol prices did not increase and off-trade sales increased from 6.3 to 6.5 litres per head.

The study also found that trends in alcohol sales per head in the North East and North West regions of England were similar to those in the rest of England & Wales. It is therefore that the reduction of sales in Scotland is real and not simply explained by cross-border sales of cheaper alcohol.



# Avatar Therapy for distressing voices: a Wellcome Trust funded randomised controlled trial

Andrew Gumley



Hearing voices is a relatively common human experience. Voices can occur after stressful life experiences, such as abuse, and transitions. When part of grieving, hearing the voice of a loved one can provide comfort and, in some cultures, voices are respected as knowledge being conveyed by ancestors. But, in developed countries, voices are generally considered a symptom of illness, such as schizophrenia and bipolar disorder. In this context, voices are often experienced as malevolent and attacking. The voices are often perceived as having greater power than the voice hearer, causing the voice hearer to feel helpless and hopelessness. Antipsychotic medications can help some, but for many people with psychosis the distressing voices persist.

Avatar therapy takes advantage of advances in digital technology and psychological models of voice hearing to create a novel psychological



therapy. A therapist, usually a clinical psychologist or cognitive behavioural therapist, works collaboratively to create an avatar (a direct digital representation) of the person's most distressing voice. The avatar is created to reflect the essential



facial and vocal features of the voice (including verbatim content, voice characterisation, the nature of voice-hearer relationship and developmental history).

Software allows the therapist to transform their own voice to match the characteristics of the avatar. Using the avatar, the therapist can work with the person to change their relationship



with their voice by empowering them to assert themselves.



A randomised controlled trial compared avatar therapy to supportive counselling. After 12 weeks treatment, avatar therapy was superior in reducing voice frequency, distress and power. By 24-weeks these differences were no longer significant due to improvements in the supportive therapy group.

A larger trial is now comparing 2 forms of avatar therapy delivery (6 versus 12 sessions) to usual care across 4 UK sites including Glasgow. The trial will include economic evaluation. An important strength of this study has been the involvement of people with lived experience of hearing voices at all stages of the conduct of the trial.



# The clinical, economic and societal burden of arthritis in Tanzania

Emma McIntosh and Sally Wyke

Previously research in Africa focused on communicable diseases, such as malaria. However, Africa is facing a rapid rise in non-communicable diseases which now account for 27% of deaths. Arthritis is an under-researched non-communicable disease which impacts the quality of life of the people who live with it, not only due to pain and disability but also by reducing income when the symptoms limit ability to work. Researchers from the School of Health and Wellbeing partnered with researchers in Tanzania to investigate the impact of arthritis on the health, wealth and quality of life of individuals and communities in Tanzania.

The survey findings demonstrated:

- A huge lack of public awareness of musculoskeletal conditions, including arthritis
- A lack of treatment facilities for musculoskeletal disorders
- A 6% prevalence of musculoskeletal disorders in Tanzania; similar to the Global North
- Significant impact on quality of life - 15-20% lower quality of life those unaffected
- People with arthritis spend more than 10% of their total income on healthcare



A study of 2,632 people living in the Kilimanjaro region highlighted:

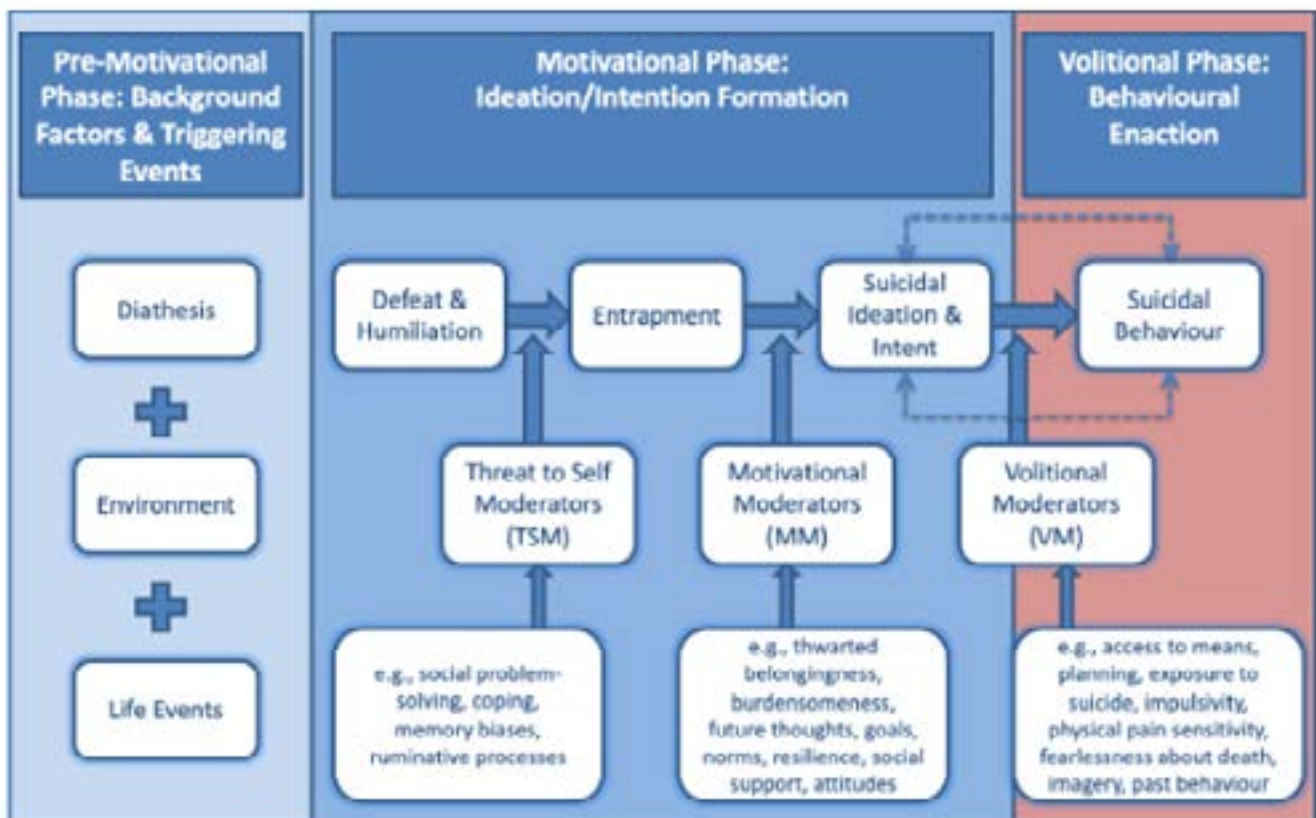
- Rural Tanzania lacked any dedicated clinics for the diagnosis and treatment of arthritis.
- Most training materials for clinicians were geared toward the UK population and needed to be adapted for work in an African setting.
- African clinicians and patients need culturally relevant training materials that specifically illustrate how to assess and diagnose a range of signs and symptoms in people with darker skin.
- Patients in Africa need educational materials in local languages.

As a result of the study, Prof Mmbaga set up the first dedicated arthritis research clinic in Tanzania. This clinic ensures people in the region can access specialized care for arthritis. With support from the University of Glasgow's Knowledge Exchange Fund and in collaboration with experts at the charity Versus Arthritis, the team is also producing additional clinical training videos in English, Swahili and French, using footage of patients from East Africa.

# Preventing suicide and supporting people in distress

Rory O'Connor

Research conducted at the Suicidal Behaviour Research Lab, led by Rory O'Connor, is helping to understand the emergence of suicidal thoughts and behaviours as well as reduce risk of suicidal behaviour in those who are vulnerable. Much of the research conducted within the Lab is guided by O'Connor's Integrated Motivational-Volitional (IMV) model of suicidal behaviour.



Recent research has included:

- Identifying factors associated with who will act on their thoughts of suicide
- Understanding suicide risk in men
- Determining whether it is feasible to embed safety planning into NHS Scotland for those who have attempted suicide
- Tracking the mental health and wellbeing of the UK population during COVID



The findings of our research have informed clinical practice as well as public policy nationally and internationally. For example, the IMV model is the guiding framework for Scotland's new 10-year suicide prevention and action plan and the Lab's research is included in the new National Institute for Health & Care Excellence (NICE) guidance on assessing, managing and preventing the recurrence of self-harm.

The Suicidal Behaviour Research Lab has also played a leading role in developing Scotland's Distress Brief Intervention.

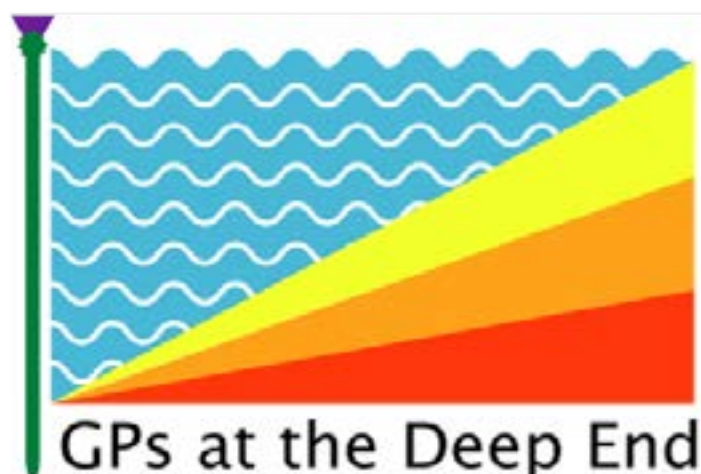
More than 32,000 people in distress have been referred into the Distress Brief Intervention programme over the last four years. Almost 70% of those referred into the programme are from the most disadvantaged parts of Scotland. The programme is now being extended to young people.



# The Scottish Deep End Project – improving primary care in areas of socioeconomic deprivation

David Blane

The Scottish Deep End Project is a collaboration between academics and frontline primary care practitioners working in the most socio-economically disadvantaged communities in Scotland. Established in 2009 with Emeritus Professor Graham Watt as a driving force, the project has developed a national profile for its work to improve primary care where it is needed most.



The past few years have been particularly challenging for patients and primary care teams in Scotland's Deep End practices. Perhaps now, more than ever, we have valued the sense of collective voice, identity, and purpose that the Deep End group has provided. Here are some recent developments:

- In March 2022, the Scottish Government produced their report on Primary Care Health Inequalities, based on collaboration (as a Short-Life Working Group) from across different professions, sectors, and interests. The Deep End group in Scotland were actively involved in this work, and in the creation of the report which made 23 high-level and aspirational recommendations, and importantly, included the 'community voice' of an established community group, called Chance 2 Change, in a powerful accompanying report. The SLWG recommendations support the wider roll out of many of the early Deep End projects such as Community Links Workers and Welfare Advice & Health Partnerships, and proposed to incorporate key learning from the Govan SHIP Project and Pioneer Scheme into future initiatives such as a multi-disciplinary postgraduate training fellowships, another key recommendation from the group. We continue to actively contribute to the work of the new Development Group. The group also featured in the recent Scottish Government report on Delivering Value Based Health & Care.
- In April, we held our third Deep End Medical Student Conference as an in-person event in Glasgow. Postponed because of the pandemic, this was a fantastic opportunity to get together and meet with medical students from across the undergraduate curriculum.



- In July, one of our steering group hosted a visit by First Minister for Scotland, Nicola Sturgeon, to her practice. The First Minister met the practice team, including the Financial Support Worker, and discussed the practice-embedded Welfare Advice Service which the practice became involved in initially as part of a Deep End pilot. This initiative has now been rolled out across Scotland.
- Throughout the year, members of the Deep End steering group have also presented at a number of external events, and many of the links can be found here. One of the highlights was our Deep End workshop at the European Forum of Primary Care annual conference in Ghent, Belgium, with the chance to meet with and learn from our international colleagues and friends. There are now 15 Deep End networks across the UK and internationally.
- We have also contributed to several Government consultations and Parliamentary enquiries on topics such as vaccine hesitancy, climate change, health inequalities, and mental health, and given presentations to the Cross-Party Group on Health Inequalities on community-based approaches to addressing health inequity.
- Recent research funding includes Health Foundation-funded research on Responses to the inverse care law in Scotland over the past 20 years (PI Blane) and NIHR-funded work on Developing interventions to reduce ‘missingness’ in health care (PI Williamson).

# ESSENCE D - creating change in the assessment of neurodevelopmental conditions

Helen Minnis, Ruchika Gajwani, Jason Lang and Chris Gillberg

In 2009, Chris Gillberg coined the term “Early Symptomatic Symptoms Eliciting Neurodevelopment Clinical Examinations, ESSENCE” consolidating decades of research. With neurodevelopmental conditions such as ADHD, Autism, Motor Coordination Disorder and Language Disorder, overlap is the rule.



ESSENCE is evident from the first years of life, but the way our traits/symptoms manifest will, to some extent, depend on our situation, and whether the environment can be modified to help. The overlap across conditions can lead to children waiting for years for one diagnosis, then sitting on another waiting list for another diagnosis. With the help of his PhD student, Sara Landberg, Chris developed 149 questions covering symptoms of all neurodevelopmental conditions. He refined these with the input of clinicians at the Gillberg Neuropsychiatry Centre/ GNC, Gothenburg, and across several health boards in Scotland. The ESSENCE Diagnostic Aid, or ESSENCE D, was born.

Helen Minnis worked with IT developers Stephen Koeplinger, from KP Fraser, and Salman Ibrahimi, from ProBrains, to develop the ESSENCE D online platform.

This is how ESSENCE D works: parents input their answers to ESSENCE D questions at their leisure through the Parent Dashboard. Clinicians access their Clinician Dashboard where the questions are organised under diagnostic headings, helpfully shaded according to high scores (dark shading), moderate scores (light shading), low scores (no shading). This makes a diagnostic assessment more efficient because the clinician can focus on the most important areas, while being unlikely to miss anything crucial.

The Scottish Government have incorporated the ESSENCE approach into the Children and Young People’s Mental Health Task Force recommendations to Scottish Health Boards, quoting Chris’s words:

The Scottish Government are asking all Scottish health boards to take the holistic ESSENCE approach and hope ESSENCE D might help. For such radical service redesign, change management expertise is needed. Enter Maryan Broadbent and Mike Fordham from Malvern insight who, along with Helen Minnis and Ruchika Gajwani, have been funded to conduct a coproduction exercise with a wide range of clinicians in NHS Greater Glasgow and Clyde – everyone from paediatricians and health visitors to psychologists and psychiatrists. We want to find out how clinicians assess neurodevelopmental conditions currently, how they plan to manage the change that Scottish Government is mandating and how ESSENCE D might help. We have been amazed at the enthusiasm for both the change and for the ESSENCE D.

It’s early days. A randomised controlled trial in Sweden and Scotland is about to launch to see if ESSENCE D really does make clinical assessment of neurodevelopmental conditions more efficient. We hope ESSENCE D will do what we all want – shorten the waiting lists so that children and their families can get the help they need.



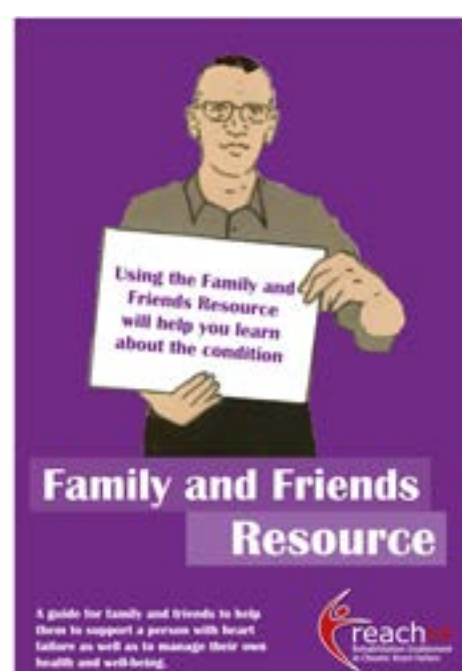
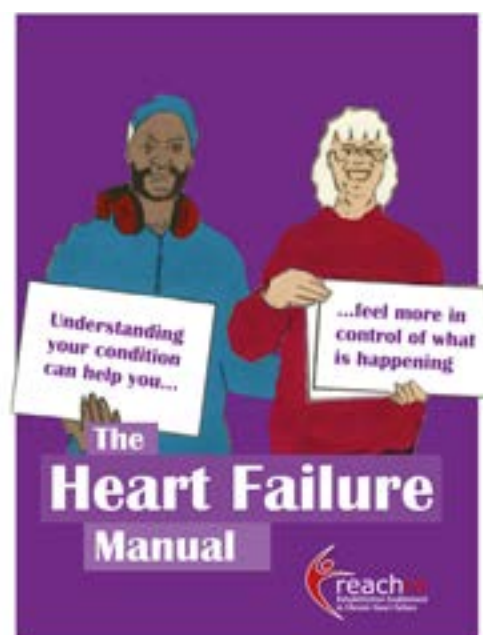
# Improving Access to Cardiac Rehabilitation for Heart Patients Across the Globe

Rod Taylor

Heart disease is the leading cause of death in the UK and worldwide; in the UK each year over 70,000 people survive heart attacks and around 200,000 people are diagnosed with heart failure. Wider access to effective cardiac rehabilitation is therefore a significant priority.

Over the last 20 years, research led Prof Rod Taylor who has been based in Glasgow since 2018, has led to changes in policy and clinical practice nationally and internationally. His ongoing programme of eleven Cochrane systematic reviews/meta-analyses with research collaborators across the globe has directly informed UK national policy and international clinical guidelines on the delivery of cardiac rehabilitation services.

Over £5million of National Institute for Health Research (NIHR), British Heart Foundation (BHF) and Heart Research UK grant funding, has allowed the development, evaluation and implementation of a theory-based, home-based, self-management cardiac rehabilitation programme - Rehabilitation Enablement in Chronic Heart Failure (REACH-HF) for heart failure patients and their families. REACH-HF research has directly informed the NICE Guideline for management of heart failure. This BMJ award-winning care programme is now being implemented as standard care across the NHS organisations in the UK, including the SCOT:REACH-HF study across Health Boards in Scotland. The adoption of home-based cardiac rehabilitation has expanded significantly, and during the Covid pandemic the REACH-HF model of cardiac rehabilitation was adapted as a digital/electronic intervention with online training, ensuring that this critical new approach was available to any patients needing such care. We are collaborating with research and clinical partners in Denmark and South Asia to adapt REACH-HF into an internationally available programme that can benefit heart failure patients and their families across the globe.



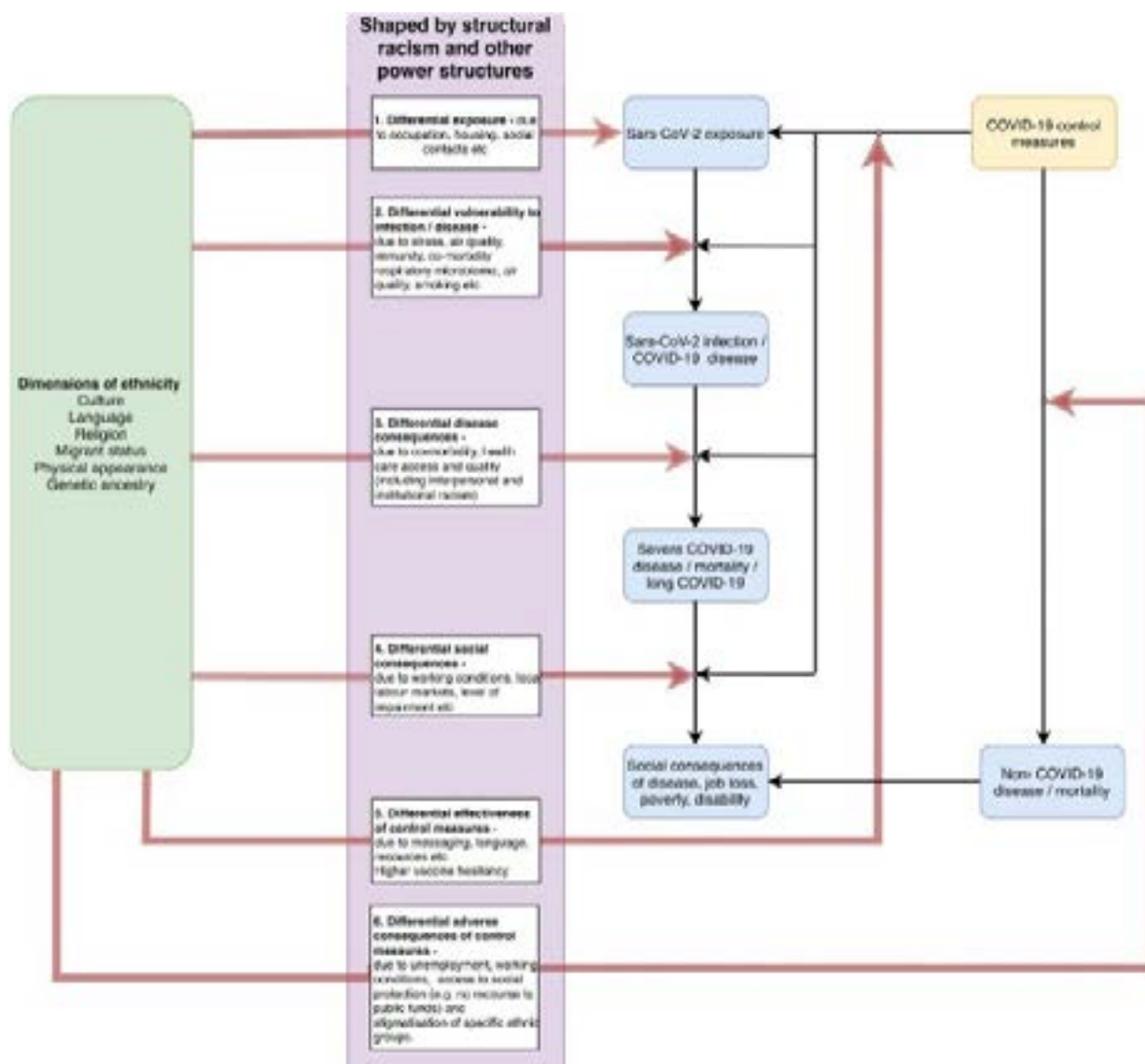
Images courtesy of NHS Lothian

# Ethnic inequalities in COVID-19

Vittal Katikireddi

When COVID-19 cases emerged in the UK in March 2020, we needed to understand who might be most severely affected. It became clear early on that older people and people with severe underlying health conditions were at higher risk. However, based on previous work conducted in the School of Health & Wellbeing, we were concerned that people living with socioeconomic deprivation and some ethnic groups might also experience higher risk from COVID-19.

We therefore conducted rapid and responsive research. We analysed data on the UK Biobank cohort which collected socioeconomic and ethnicity information before the pandemic. This information had been brought together with data on hospital admissions for COVID-19, allowing us to look at whether specific ethnic and socioeconomic groups were experiencing greater harms. We found substantially higher risks in ethnic minority groups that were not explained by lifestyle differences. Following this, I was invited to give a briefing to the Chief Medical Officer (Chris Whitty) and Chief Scientific Advisor (Sir Patrick Vallance) about our findings.





The Scientific Advisory Group on Emergencies (SAGE) provided responsive evidence to the UK Government to inform their policy response to the COVID-19 pandemic. I was invited to attend SAGE to present our research, describe key evidence gaps and suggest priorities for future research. SAGE subsequently established a subgroup on ethnicity. Within that, we developed a framework to understand the drivers of ethnic inequalities in COVID-19 outcomes which helped guide thinking about action to address them. We also identified early indications of ethnic differences in vaccine hesitancy, prompting recommendations to provide additional support and co-develop vaccine messaging to maximise uptake.

Similar scientific groups were convened in Scotland. The Expert Reference Group (ERG) on Ethnicity and COVID-19 was established by Scottish Government and co-chaired by me. We identified a number of barriers to providing a COVID-19 response that met the needs of ethnic minority communities, including substantial limitations in monitoring of ethnic inequalities and a lack of policy responsiveness. The ERG produced recommendations for the Scottish Government and others to help reduce ethnic inequalities in the future – many of which are now being taken forward.

Overall, the COVID-19 pandemic highlighted many longstanding inequalities which had been neglected for some time. Academics from the University of Glasgow and beyond responded by providing much-needed evidence at pace to inform policymaking. However, reductions in ethnic and other inequalities will ultimately require long-term action.

# Use of shielding during the COVID-19 pandemic

Fred Ho and Jill Pell

Many western countries used shielding (extended self-isolation) to protect people presumed to be at high-risk from COVID-19 and reduce healthcare demand.

We investigated the effectiveness of this strategy by linking family practitioner, prescribing, laboratory, hospital and death records and comparing COVID-19 infection rates and outcomes among shielded and non-shielded individuals in the West of Scotland.

Of the 1.3 million population, 27,747 (2.03%) were advised to shield, and 353,085 (26.85%) were classified a priori as moderate risk. The latter were advised to be diligent in following general advice, but were not advised to shield.

COVID-19 testing was more common in the shielded (7.01%) and moderate risk (2.03%) groups, than low risk (0.73%). Referent to low-risk, the shielded group had higher confirmed infections (RR 8.45, 95% CI 7.44–9.59), case-fatality (RR 5.62, 95% CI 4.47–7.07) and population mortality (RR 57.56, 95% CI 44.06–75.19). The moderate-risk had intermediate confirmed infections (RR 4.11, 95% CI 3.82–4.42) and population mortality (RR 25.41, 95% CI 20.36–31.71) but, due to their higher prevalence, made the largest contribution to deaths (PAF 75.30%). Age  $\geq 70$  years accounted for 49.55% of deaths. In conclusion, in spite of the shielding strategy, high risk individuals were at increased risk of death. Furthermore, to be effective as a population strategy, shielding criteria would have needed to be widely expanded to include other criteria, such as the elderly.



# The Impact of COVID-19 on People with Learning Disabilities

Angela Henderson, Deborah Cairns, Michael Fleming, Sally-Ann Cooper, Jill Pell, Craig Melville, Daniel Mackay, Chris Hatton

In 2020, the Scottish Learning Disabilities Observatory (SLDO) undertook a study to investigate the rates of infection, case fatality and excess deaths due to COVID-19 among people with learning disabilities in the first wave of the pandemic in Scotland. The aim of this study was to understand and provide evidence of the impact of COVID-19 on people with learning disabilities in Scotland. This information was urgently required to inform clinical decision-making and public health policy in Scotland and the UK. The findings from this study contributed to the Scottish Government's decision to include all people with learning disabilities in the Priority 6 vaccination group in February 2021.



People with learning disabilities experience high levels of health inequality. Studies have found that people with learning disabilities die 20 years earlier than the general population, often from preventable or treatable conditions. Leading causes of death in children and young people as well as adults with learning disabilities are respiratory illnesses such as pneumonia or the flu. Throughout 2020, there was a major gap in the data available in Scotland on the impact of COVID-19 on people with learning disabilities. Given our knowledge of existing health inequalities and increased risk of death from respiratory conditions, it was critically important that this gap be addressed.

We linked information from Scotland's Census 2011 with death registrations, hospital admissions records and COVID-19 testing data to investigate COVID-19 infection, hospitalisation and death rates.

We found that, overall, people with learning disabilities were over three times more likely to die from COVID-19 than people in the general population. We also found that, when compared to the general population, people with learning disabilities were twice as likely to become infected with COVID-19 and they were also twice as likely to experience a severe outcome of COVID-19 infection, resulting in hospitalisation and/or death. We published the preliminary findings on the Observatory website to enable the Scottish Government to use the evidence to support urgent decision-making around vaccine rollout and to respond to calls for the inclusion of all people with learning disabilities as a priority for vaccination. The findings were also shared with our stakeholders via social media, traditional media and through direct engagement with key partners.



Following publication of the study findings, stakeholders from across the learning disabilities sector, including self-advocates, urged the Scottish Government to respond. As a direct result of the study, the level of priority given to vaccination of people with learning disabilities was increased and they were invited for vaccination as part of priority group 6.

# Contact Tracing for COVID-19 – Equal for All?

Kate O'Donnell

In the summer of 2020, Scotland – like all countries – was grappling with the first wave of the COVID-19 pandemic. With vaccines yet to be developed, we had to rely on non-pharmaceutical interventions such as avoiding contact with cases. A key part of the Scottish Test and Protect programme was contact tracing. When someone tested positive for the virus, it was important to quickly identify and get in touch with all their contacts from the previous 10-14 days. Contacts were asked to get tested and, if positive, self-isolate. To speed up contact tracing, the Scottish Government supported the development of digital contact tracing tools which could be used on smartphones and computers.



## What did we do?

We were commissioned to find out what people thought about using digital tools for contact tracing and we had to ensure we included people who might not always be involved in research. First, we spoke to organisations working with different people – minority ethnic groups, people living in severe poverty, people living with addictions or experiencing domestic abuse, groups working with younger and with older people. Then we spoke to 29 members of the public from different parts of Scotland including towns, cities, and the countryside.

## What did they tell us?

People wanted to help in the fight against COVID-19. They saw taking part in contact tracing as important in dealing with COVID-19. But they also wanted to make sure that contact tracing was fair – they didn't want people to worry about giving personal information about themselves, their family and friends. It was important for them to know how any information about people was being collected, who could access it and for how long it would be kept. Knowing that contact tracing was part of NHS Scotland reassured people. Not owning a smartphone or computer, or not being able to pay for internet access, was a problem. People also worried about the costs of self-isolation, especially if contacts were on a low wage or a zero-hours contract.

## How did our research help?

We were able to tell the team developing the digital tools what people thought of them; whether they were easy to use or not. We also told them what the public thought about contact tracing. We learned important lessons about the challenges that some people face – both in being able to use digital tools but also about giving information on recent contacts and the difficulties that people face if they need to self-isolate. These lessons will be important in managing future epidemics or pandemics.

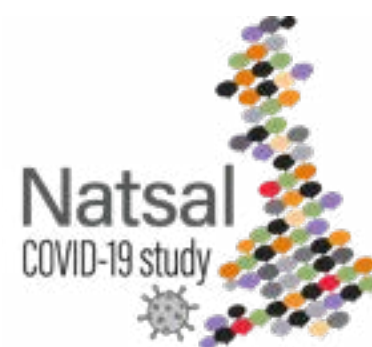


# Tracking change in sexual behaviour and service provision during the pandemic: The Natsal-COVID study

Kirstin Mitchell

The COVID-19 pandemic severely disrupted sexual and reproductive services in Britain. Understanding the impact of this requires population-level data on sexual behaviour that is not available from existing longitudinal or general health surveys.

The Natsal-COVID study met this crucial gap. Data were collected from adults aged 18-59 years via a web-based panel survey (quota-sampled then weighted) in two waves: four months after the first lockdown (6,654 participants) and one year after the first lockdown (6,658 participants).



First wave data showed a decline in frequency of partnered sex and increase in virtual activities for those in less formal partnerships. The survey confirmed significant unmet need for sexual and reproductive health services (including contraception). Qualitative follow-up interviews found people self-censored their need and/or encountered multiple challenges navigating access to services.

Data from the second wave showed that reductions in sexual risk behaviour and service uptake were still evident one year later. There were fewer reported pregnancies, fewer reported abortions, and increased sexual dissatisfaction and distress, compared with what might be expected based on previous survey and surveillance data.

Data were made quickly available to practitioners and policy makers via an international webinar (audience >500 people), pre-prints, direct inputs into Government Sexual Health recovery plans, multiple presentations at national and international conferences (e.g. STI & HIV World Conference in July 2021), numerous invited talks to clinical, academic and policy audiences (including UK Health Security Agency), and citations in key surveillance reports.

Findings were discussed in print media, radio interviews (BBC Radio 4 PM with Evan Davies; BBC Five Live 'Sex and the Pandemic' show with Naga Munchetty) and television ('The Nine', national news programme in Scotland). The study has been highlighted in blogs (e.g. 60 seconds on COVID and sex in BMJ), podcasts and a BBC video hosted on their news site.

The study has published 11 papers to date and has provided data to a host of MSc and Doctoral training projects.

Natsal-COVID was co-led Kirstin Mitchell and comprises the investigators from University of Glasgow, UCL and LSHTM responsible for the National Surveys of Sexual Attitudes and Lifestyles (Natsal; [www.natsal.ac.uk](http://www.natsal.ac.uk)). Datasets are available from the UK data archive (Study #8865) and further study information from <https://www.natsal.ac.uk/natsal-covid-study>.



## Assessment of COVID-19 in primary care

# Assessment of COVID-19 in primary care evidence review (SIGN 162)

[www.sign.ac.uk/our-guidelines/assessment-of-covid-19-in-primary-care/](http://www.sign.ac.uk/our-guidelines/assessment-of-covid-19-in-primary-care/)

Kate O'Donnell, Ryan Field, Robert Heggie, Dikshyanta Rana, Janet Bouttell, David Blane, Bhautesh Jani, Olivia Wu

The Scottish Intercollegiate Guideline Network (SIGN) is a respected part of NHS Scotland which pulls together multi-disciplinary teams to produce guidelines advising doctors and other clinical staff about best practice (<https://www.sign.ac.uk/>). In Spring 2020, during the first COVID-19 lockdown, SIGN approached the School of Health and Wellbeing for assistance in producing an evidence summary for primary care doctors to help them to identify those patients likely to suffer from the most severe forms of COVID-19. We reviewed the evidence and drafted the first version of the guidance. As COVID-19 was so new, there were not many UK studies. We had to rely on evidence from the first few places to have significant numbers of COVID-19 cases, including China, the USA and Italy. In more normal times, SIGN would not use evidence unless it had been quality checked by peer review. As it was so important to provide advice on a timely basis to primary care doctors, we included all the relevant evidence in our review, including pre-publication studies.



In May 2020, the first version of our evidence review was published. We have produced a further three versions of the guidance since its launch in May 2020, the latest in March 2022. These reviews had been accessed online over 7,000 times by October 2021 as well as being accessed through an app developed by the NHS. As time progressed, the quality and relevance of the evidence improved. The majority of the guidance is now based on large UK studies, and we have incorporated evidence about the impact of vaccination, and evidence about pregnant women and children.

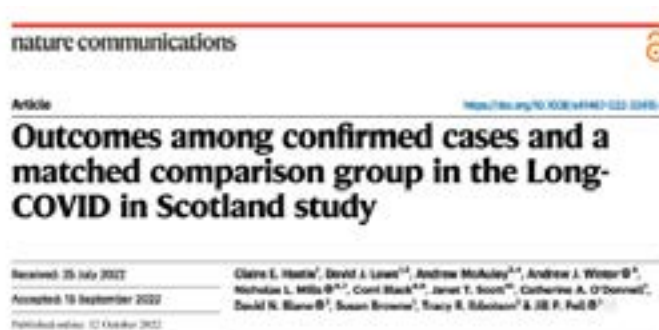
The evidence review identified the clinical signs, symptoms and characteristics that indicated a patient may be at greater risk. For example, older people and men were consistently found to have a higher risk of needing to be admitted to hospital and needing support to breathe. People who had chronic kidney disease, were obese or had certain heart conditions were also found to have higher risk of severe COVID-19, whereas the evidence was unclear about whether smokers were more at risk.



# Long-COVID

Claire Hastie and Jill Pell

The Long-COVID in Scotland Study (Long-CISS) used the Scottish PCR test result database to identify and invite every adult in Scotland who had had a positive PCR test for COVID-19 and a comparison group of people who had a negative test only. We included existing cases and added new cases as they occurred, and a total of 257,341 people participated. Study participants completed questionnaires at 6, 12, 18, and 24 month follow-up. We also linked this information to their routine health data on medications, hospital admissions and deaths.



## Self-reported long COVID

- was very common – following symptomatic infection 42% reported that they had only partially recovered and an additional 6% said they have not recovered at all
- was more common among people who had to be hospitalised for their COVID infection, women, people living in deprived areas and those with pre-existing health conditions (especially multimorbidity)
- was associated with worse quality of life, impairment across all aspects of daily living and a wide range of symptoms

The true frequency of long-COVID was much lower than the self-reported frequency. Apart from altered taste and smell, the symptoms of long-COVID are non-specific and therefore may occur irrespective of infection. Therefore, whilst 64.5% of the people in this study reported at least one symptom 6 months following SARS-CoV-2 infection, this was also true of 50.8% of those never infected. The 'true' prevalence of long-COVID (percentage of people who had one or more symptom that would not have occurred anyway) was 6.6%, 6.4% and 10.3% at 6-, 12- and 18-month follow-up.



## Between 6- and 12-month follow-up

- The overall percentage of people with one or more symptom did not change, but there were changes in specific symptoms
- Altered taste, smell and confusion improved over time in the post infection group when compared to the never infected group
- Conversely, late onset dry and productive cough, and hearing problems were more likely following SARS-CoV-2 infection than among those never infected.

# Public and Patient Involvement and Engagement (PPIE) in COVID-19 research

Tracy Ibbotson, David Blane and Kate O'Donnell



**LONG COVID  
SCOTLAND**

Involving public and patients is a key aspect of research that ensures research is meaningful and has a societal impact. Our researchers and the MVLS Public and Patient Involvement and Engagement (PPIE) Steering Group met with Chris White from the Long Covid Scotland in 2020 to establish the MVLS PPIE Covid group to develop PPIE activities in Covid research.

- Long COVID: Brain Fog & Vaccines. In September 2021, the MVLS PPIE Covid group, our researchers and Long Covid Scotland co-produced an online event at the Glasgow Science festival where researchers, public health professions and patients came together in a series of online talks exploring Long Covid from a range of perspectives. The team compiled a set of resources where people could find out more about the research and how to get involved.
- The Conversation Cafe was an online event to discuss how people can be involved in Long Covid research. The event was co-produced by researchers, PPIE members, Alliance Scotland and Long Covid Scotland in February 2022. The event emphasised the crucial role of building trust in dialogue with public and patient partners in research.
- Conversations about Covid was a public involvement and engagement event, held on the 28 September 2022, as part of the University of Glasgow ARCadia 'Festival of Ideas.' The aim was for the University of Glasgow research community to meet with members of the public and people with lived experience to share thoughts on how we involve people in research. The event was co-produced by the MVLS PPIE groups, our researchers and Long Covid Scotland.



- The ARCadia festival ran an event about the impact of covid on staff and students in 50-100 words.

***Catching Covid, not fully recovering and developing long covid was a big life change for me. However, a definite positive was becoming involved in PPIE work in a project on long covid symptom management. I've developed new skills and work with some great people to make a real difference towards improving the lives of those with long covid.***

Jane Ormerod, member of MVLS PPIE COVID Group

***We all experience illness during our lives. We look to treatments to aid recovery or make symptoms less disruptive, more manageable. Research doesn't just happen under a microscope. Researchers need to understand the patient experience. That's why patient involvement matters. Living with Long Covid - my experiences - can make a difference.***

Chris White, member of MVLS PPIE COVID Group

The PPIE group, led by Tracy Ibbotson, make significant contributions to Covid-19 research undertaken by the School:

- The **Long-COVID in Scotland Study (CISS)** team (Hastie, Pell, O'Donnell, Blane, Browne, Ibbotson) had regular meetings with the MVLS PPIE Covid group from November 2020. The group talked about the importance of mental health issues and access to services for people with long covid, and provided critical advice about recruiting via social media.
- The £1M NIHR-funded **ReDIRECT study** (Blane, Ibbotson, McConnachie, McIntosh, O'Donnell) worked closely with Long Covid Scotland who facilitated an online survey that found people with Long COVID are interested in the role of nutrition in self-management and how diet and weight management might affect their symptoms.
- **Contact Tracing for COVID-19 – Equal for All?** (O'Donnell, Macdonald, Browne, Albanese, Blane, Ibbotson) used online meetings to communicate with a patient partner, Lynn Laidlaw during the early stages of lockdown. Lynn was able to provide a patient perspective on the findings from qualitative interviews about using digital tools for contact tracing.
- **Caring for Long Covid in Primary Care** (O'Donnell, Blane, Macdonald, Browne, Ibbotson) was informed by the Long COVID Scotland survey conducted by Ormerod and White in 2022 and from Long COVID Café conversations organised by Ormerod and SHW colleagues. Working with people with lived experience will ensure that the research addresses their concerns, as well as facilitating recruitment and ensuring appropriate and impactful dissemination.



The PPIE group continues to meet regularly, and you can find more information about PPIE in research in the University of Glasgow at [www.gla.ac.uk/mvls-ppie](http://www.gla.ac.uk/mvls-ppie)

# Growth in the Masters in Public Health and Global Mental Health

Sharon Greenwood and Julie Langan-Martin

## Masters Programmes

The largest Masters degree programmes in the School of Health and Wellbeing are the Masters in Public Health (MPH) on-campus and online distance learning (ODL) programmes. These programmes have grown substantially since 2020. Currently there are 81 on-campus students and 70 ODL students enrolled. The Global Mental Health (GMH) MSc programmes (on-campus and ODL) have also continued to be successful. Since 2020, student numbers have grown slightly with 29 on-campus students for the 2022/2023 academic year and 48 ODL students. The Health Technology Assessment (HTA) ODL MSc continues to run with stable recruitment and currently there are 39 students enrolled. The Primary Health Care ODL MSc continues to run with stable recruitment and currently there are 8 students enrolled. The PgCert in Positive Behavioural Support (PBS) was launched in January 2020. The course is now in its fourth cohort, with the PgDip, and MSc running for the first time in 2023/24. Numbers have increased since this course began in 2020 and there are 26 students enrolled in the PgCert, 9 students in the PgDip, and 7 students in the MSc. In 2020, the Digital Health Intervention (DHI) MSc launched. To date, four students have completed the MSc. Population Health Sciences ODL MSc was launched in 2018. To date 3 students have completed the MSc and 11 students remain enrolled in the programme. The Developing and Evaluating Health Interventions was launched in 2019. To date 4 students have completed the MSc and 2 students remain enrolled in the programme. Below some of our alumni share their stories.

## Micro-credentials and ExpertTrack

Since July 2020, the School has launched three micro-credentials: Impact of Trauma on Mental Health (IoT), Substance Use in the Contemporary World (SUCW) and Infant Mental Health (InfMH). The IoT micro-credential has run on three occasions (July 2020, January 2021, and January 2022) with 633 students enrolled and SUCW has run once (Jan 2022) with 93 students enrolled. Further runs are planned for January 2023 and April 2023 respectively. The Infant Mental Health micro-credential launched in September 2022 with 85 students enrolled. There have also been 38 students enrolled in the 'Using Health Technology Assessment in support of Universal Health Coverage' ExpertTrack hosted on Future Learn.



## Comfort Kyeremeh (MSc in Global Mental Health)



The GMH MSc provided me with an opportunity to look at mental health from a global, complex, and sociocultural viewpoint. Experiencing the stress, difficulties, and responsibilities that came with being a postgraduate taught (PGT) student also fuelled my humble curiosity in wanting to develop more understanding and empathy towards how higher education students stay on top of academic workload while looking after their mental health. To explore this curiosity further, and as part of my MVLS Graduate Skills Award extracurricular activities, I volunteered as a Peer Support with Glasgow University Positive Minds, a student society focused on providing easily accessible peer-led mental health support on campus. This really challenged me to evaluate and appreciate the intricate student journey and how the sociocultural way of doing things influences concepts of mental health, stress, and the manifestation of mental ill-health. This newfound passion

and empathy continued to fuel my career choice/path after graduating as I wanted to put my GMH knowledge, nursing experience and skills to use in supporting higher education students' mental health and wellbeing. As a result, my first job was as a Mental Health Mentor with The University of Edinburgh and I recently commenced a similar role at University of St Andrews as a Mental Health Coordinator. In both roles, I have worked with students from all over the world and endeavoured to offer mental health support that is socioculturally sensitive and person-centred. I also take part in an initiative that delivers virtual mental health educational talks/sessions for people all around the world.

What I learnt having attended University of Glasgow and completed the GMH course is the:

- world-class teaching/course contents
- encouragement and excellent opportunities on offer from staff
- tremendous support from lecturers, career advisors and student societies etc.

So, I encourage all current and prospective students in the School of Health and Wellbeing to truly explore and make use of the vast academic and developmental opportunities available to them. I am proud to be an alumnus of SHW and this great university as a whole and will forever be grateful for the opportunities I was given to be part of something amazing that has helped shaped my career in being a University of Glasgow world changer.

### **Dr. Mahnoz Illias (MSc in Global Mental Health)**



As a medical graduate, I got the opportunity to learn about human health and wellbeing in detail during my undergraduate years. However, I noticed a gap in knowledge about mental health in the overall curriculum which encouraged my inquisitive mind to learn more about mental health. In a world dominated by the evident dichotomy of health into physical health and mental health, pursuing an MSc in Global Mental Health at the University of Glasgow with a Commonwealth Shared Scholarship endowed me with the opportunity to come across like-minded people believing in equal status of mental health as physical health. This MSc helped me to flourish my academic skills as well as personal skills. I learned in-depth about the concepts of mental health and mental health systems around the world, the existing gaps, and the ways to bridge the gaps in an international setting, facilitated by the active participation of my fellow course mates coming

from diverse geographic and professional backgrounds. Moreover, the constant support and guidance from the GMH team members made my journey as an MSc student easier. This MSc also gave me the opportunity to strengthen my research skills. I would be always grateful to the GMH team for making me realise my passion for research, which always seemed unattainable otherwise. The unique teaching and training design of the MSc helped me earning a position as a Ph.D. Student at one of the world's leading research units - the MRC Social and Public Health Sciences Unit in the School of Health and Wellbeing. I would always cherish both formal and informal knowledge I gained through this MSc. Undoubtedly, this MSc was a turning point of my life.

### **Dr Rasika Joshi (Masters in Public Health)**

I was always passionate about Public Health and wanted to learn from a top leading university. The University of Glasgow, being one of the Russell Group universities made me shortlist it for my Masters along with which the modules fitted perfectly with what I was looking for. The part that I enjoyed most was being in a cohort of varied international classmates and learning so much from everyone. Also, the professors made my journey extremely smooth in a foreign land by being very helpful. The services and utilities all over at the University of Glasgow, especially during the pandemic, made it an unforgettable experience. I now work as a Public Health Researcher at KEM Hospital and Research Centre in Pune, India.

# Wellcome Trust Doctoral Training Programme on Multimorbidity

Frances Mair

A consortium led by Frances Mair, in the School of Health and Wellbeing, in collaboration with the Universities of Dundee, Edinburgh and St Andrews was awarded, in October 2021, £8.5 million by the Wellcome Trust to support a multimorbidity PhD Programme for health professionals. The new doctoral training programme aims to create a generation of innovative world-leading researchers empowered with expertise to find ways to prevent multimorbidity, discover pathways tractable to novel intervention, and optimise management. A total of 25 fellowships will be funded by the Wellcome Trust across all the partner institutions. Additionally, partner universities will also provide local funding for an additional 9-10 fellowships, contributing to the creation of a cohort of specialist multimorbidity researchers.

The Programme is led by a team of Programme Directors which includes Prof. Frances Mair, Head of General Practice and Primary Care, within the School of Health and Wellbeing at the University of Glasgow; Prof Bruce Guthrie, Professor of General Practice and Director of the Advanced Care Research Centre at the University of Edinburgh; Prof. Ewan Pearson, Professor of Diabetic Medicine & Honorary Consultant at the University of Dundee; and Prof. Colin McCowan, Professor of Health Data Science at the University of St Andrews. Each University also has a Deputy Director to support the programme.



Professor Frances Mair  
Director Multimorbidity PhD Programme  
University of Glasgow



Dr Barbara Nicholl  
Deputy Director of Programme  
University of Glasgow

The Programme aims to address the substantial challenges posed by increasing multimorbidity. Hosted in the Scottish societal context, where multimorbidity is a significant health concern, but examining globally relevant problems. It seeks to deliver PhD projects designed to build synergistic, multidisciplinary collaborations across participating institutions, promoting new thinking on this complex topic. This programme offers projects in three broad areas (Prevention & Management, Physical & Mental Health Multimorbidity, and Polypharmacy), with one cross-cutting theme (Inequality) which map to our partnerships research strengths and key issues outlined by The Academy of Medical Sciences.

The Programme's vision is to create a cohort of academic health professionals (doctors/nurses/pharmacists/dentists/allied health professionals/clinical psychologists), with skills across the research spectrum from experimental medicine through to complex interventions and clinical trials, equipped to bridge the research gaps and overcome the challenges posed by multimorbidity. Fellows are recruited from a range of clinical disciplines and health professional backgrounds.

This is the composition of the programme's first cohort, which commenced on 1st November 2022:



Sarah Bowers  
Palliative Medicine  
Specialist Registrar  
University of St Andrews



Neave Corcoran  
General Practitioner  
University of Glasgow



Josie Murray  
Consultant in Public Health  
University of St Andrews



Rose Penfold  
Registrar in Geriatrics  
and General Medicine  
University of Edinburgh



Dhaneesha Senaratne  
Registrar in Anaesthesia  
University of Dundee



Heather Walker  
Renal and General  
Medicine Trainee  
University of Glasgow

The second cohort of Research Fellows will commence in August 2023.

For more information, see the programme website at  
<https://www.gla.ac.uk/colleges/mvls/graduateschool/multimorbidity/>



# Early Career Researchers

Paul McCrorie

A successful organisation has many moving parts, processes, and people and this is no different in the School of Health and Wellbeing. Our School is richly supported by a talented cohort of early career researchers (ECRs) who make a substantial contribution to our academic and non-academic outputs and impact, our high standards of teaching, and successful relationships with multi-sector stakeholders.

Over the previous two years, work led by School ECRs has focused on broad research areas across the health and wellbeing landscape, including, but not limited to: the determinants of heart failure hospitalisation; physical activity and risky play in nature; inequalities in oral health; trauma and psychosis; health and educational outcomes in schoolchildren; suicidal intent in those who self-harm; loneliness, mental health literacy and stigma in young people; not to mention taking on the massive challenge of supporting people all over the world with research evidence in response to the multifaceted impact of COVID-19. Our ECRs have been successful in a variety of funding applications, including projects to explore the relationship between child maltreatment and biological ageing, and the development of a risk prediction tool to detect neurodevelopmental multimorbidity in children and adolescents.



Our amazing work has led to demonstrable impact across all research areas, no less in the great work we do with children, young people, and adults with learning disabilities. For example, the findings from Michael Fleming and SLDO colleagues led directly to changes in COVID-19 vaccination policy to prioritise people with learning disabilities and Dr Laura Hughes-McCormack and colleagues' recent paper exploring the rates, causes, and

predictors of avoidable mortality in children and young people with learning disabilities led to the viral dissemination of her findings across the national print, radio, and TV media, optimising its reach.



The culture embedded throughout the School firmly embodies the values espoused by the University, and is no less obvious in our ambitious, curious, and inclusive ECR community. This can be no better demonstrated than by SHW ECR, Dr Laura Ward, who has worked tirelessly to develop and strengthen real relationships with valuable non-academic organisations to co-create genuine impact for those whom our research is intended to benefit. After reaching out to a non-profit social enterprise working with adults with learning difficulties, autism, and/or mental ill-health, Laura, in collaboration with the Dental School, led the development and tailored delivery of an evidence-based oral health promotion event. This event epitomises the person-focused and inclusive approach to reducing inequalities in health, whilst ensuring the voices of those we work with are at the centre of any impact.

Structurally, the School has provided a prominent platform for ECRs to raise their concerns, with their voices represented at multiple levels throughout the School and College. The SHW Athena Swan ECR working group has reimagined its structure to better address the most pressing practical issues around career development, progression, and support. Our focus on the implementation of the Researcher Development Concordat and our newly launched programme to match ECRs to teaching opportunities are indicative of this supportive and constantly evolving position.

Our early career researchers are a diverse and vibrant community with genuine desire to contribute to the wider success of the School and University. Their value is self-evident, and we are lucky and appreciative of their contribution.

# Looking back .....

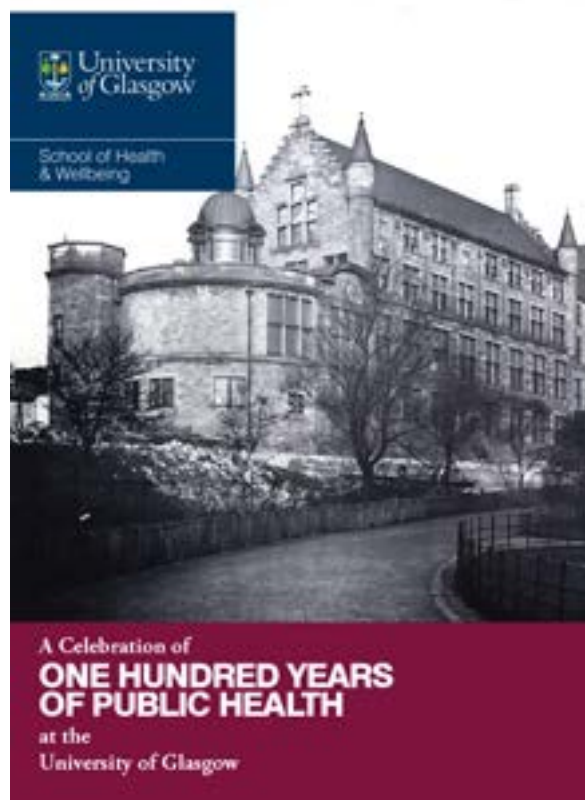
## 100 years of academic public health

Jill Pell

2023 sees the centenary of academic public health in the University of Glasgow; 100 years since the appointment of the first Henry Mechan Chair in Public Health - John Ronald Currie - in 1923. To date, nine people have held the Henry Mechan Chair. Their varied interests have reflected the public health challenges faced during their tenure. Over the 100 years, the improvements in living conditions, prevention, screening and treatment have achieved many successes, the development of vaccines brought an end to historical public health scourges such as smallpox and polio, and improvements in diet and housing significantly impacted conditions such as rickets and tuberculosis. A 50-year public health battle achieved reductions in tobacco-related harm through legislative and fiscal measures as well as reduced advertising and access, but the new public health threat from obesity requires a similarly concerted effort. Overall improvements in many measures of health have been marred by the persistence of inequalities in health, and the solution cannot be delivered by the health sector in isolation. Just as our predecessors understood the wider determinants of health, highlighting the need to improve housing conditions, provide clean air and water and access to healthy food, so we continue to work with partners outside of the health sector to ensure that people live in a safe, secure and supportive environment in which healthy choices are accessible and affordable to all. Unfortunately, some public health problems have come full circle. A century ago, communicable diseases, such as pneumonia and dysentery, were major contributors to mortality and morbidity. Antibiotics greatly reduced the incidence and impact of such conditions.

However, over recent years, the development of antimicrobial resistance, such as drug-resistant tuberculosis, and increases in zoonoses, such as avian influenza and coronaviruses, have resulted in the re-emergence of communicable diseases as a major threat to public health. Addressing this problem will need the combined efforts of multiple partners; not only medical and veterinary practitioners, but also the animal husbandry and food industries. In addition, we have encountered, over recent decades, an increasing mismatch between supply and demand. The finite resources of the health and social care sectors are overstretched due to improved survival, an aging population, and an increase in multimorbidity. Therefore, past efforts and achievements should be celebrated but also continued.

Beverly Bergman's book 'A Celebration of 100 years of Public Health in Glasgow' can be accessed on the Public Health website [www.gla.ac.uk/schools/healthwellbeing/research/publichealth/](http://www.gla.ac.uk/schools/healthwellbeing/research/publichealth/)



# 50 years of academic general practice

David Blane

2024 will mark 50 years since the Norie Miller Chair in General Practice was established in 1974. Hamish Barber was the first appointee to the post, which was funded by the General Accident Fire and Life Assurance Corporation. Among his many achievements, Hamish oversaw the expansion of general practice teaching to feature in every year of the undergraduate medical course, and his department was at the forefront of educational developments, including problem-based learning, computer-assisted learning, and a module-based MSc course in general practice. When he retired in 1993, he left a legacy which included five of his team (David Hannay, Stuart Murray, Frank Sullivan, Tim Usherwood and Jill Morrison) becoming professors of general practice.

From an initial focus on general practice, the General Practice and Primary Care (GPPC) group is now multidisciplinary, engaging with a range of clinical and non-clinical disciplines and academic activities (research, teaching and scholarship) in primary health care. After the first phase of development, based at Woodside Health Centre under the leadership of Professor Barber, the next phase involved moves first to Lancaster Crescent and then to Horselethill/Observatory Road, with Professor Graham Watt (1994 to 2009) then Professor Frances Mair (2009 to present) at the helm. They have overseen the expansion to more than 50 staff, with significant developments in undergraduate and postgraduate teaching, higher professional research training and numerous research projects. We look forward to GPPC's next phase, with all of its School of Health and Wellbeing colleagues in the Clarice Pears building, where co-location, co-operation and collegiality will continue to be our recipe for success.



# 10 years of Hawkeye

Jane Goodfellow



Our original newsletter started when we became the Institute of Health and Wellbeing in 2012 as a way of sharing news across our seven research groups. HAWKEYE (Health And Wellbeing Knowledge Exchange Your E-newsletter) was launched in 2015. (Its quirky name was coined by David Blane in General Practice and Primary Care). Initially produced as a Microsoft Word doc, then via MailChimp, we moved to a web-based system (t4) in 2018 and then, in 2022, after we became the School of Health and Wellbeing, to Microsoft Sway, to enhance both its appearance and its functionality.

Any member of staff or student is welcome to contribute. We invite both work-related content (research and teaching news, event reports, public and community engagement updates), and articles of a more personal nature (SHW voices) with a particular emphasis on topics relating to equality, diversity, inclusion (EDI) and wellbeing. For accessibility, we encourage contributors to use plain language. We also aim to balance “good news” stories and successes with reflections on the challenges of working life/study. Themed issues of HAWKEYE have included COVID and Black Lives Matter editions. Annual Athena Swan/EDI editions (Oct 2022 | Oct 2021) focused on our ongoing efforts to make the School a fair, respectful, healthy and happy place to work. We regularly survey colleagues to find out what they think and, where feasible, implement suggested improvements.

We hope that, whatever a colleague’s role, interests and circumstances, there is something in HAWKEYE for all in the School to relate to, enjoy and gain from.

# Looking forward .....

2023 sees the School of Health and Wellbeing move from ten sites located across the city to the purpose-built Clarice Pears Building. The Clarice Pears building is the 'gatehouse' to the new campus. The vision for our building was based on the vision for our School. The building was designed to:

- Support diversity, inclusivity and accessibility
- Be civic-facing and publicly accessible; house public engagement and knowledge exchange activities, and provide ideation space to work with external multi-sector partners
- Be a space that promotes the health and wellbeing of occupants and visitors
- Support multidisciplinary research, and
- Provide facilities that enhance the learning experience of students.

Open spaces with natural materials and living walls



Natural light and natural ventilation



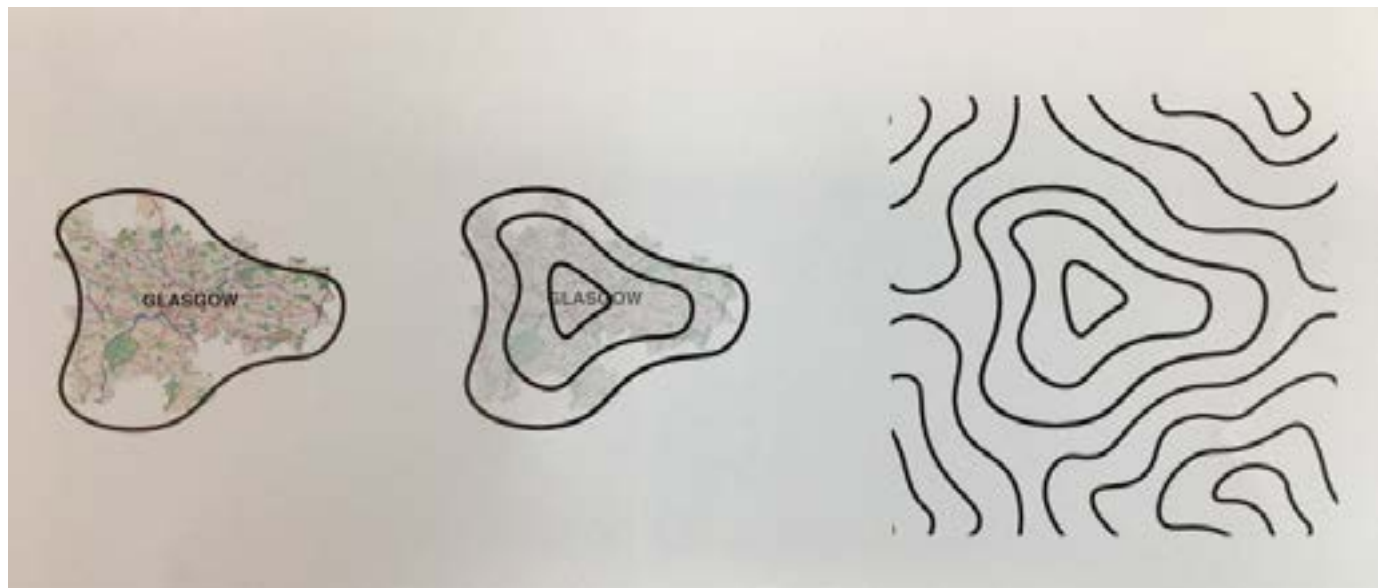
Cafe Omni selling sustainable, healthy food



Road testing and building exhibits



The design on the external cladding is a public statement of our mission. The design based on the outline of Glasgow City illustrates our aim to impact on the health and wellbeing on Glasgow residents and beyond, both nationally and internationally.



Integral to the new Clarice Pears building is community engagement with research. While our ambition for the space pre-dated the Covid pandemic, the pandemic brought into focus the value of the third and voluntary sector as they pivoted their activities and mobilised themselves quickly to support the most vulnerable in their communities. Our aim to make Clarice Pears truly part of our community is more vital than ever.

The Byres Community Hub will house interactive exhibits, host public seminars on health-related themes and networking events with community organisations and researchers. The space will provide opportunities for the local community to get involved in research by forming patient and public involvement and lived experience panels.

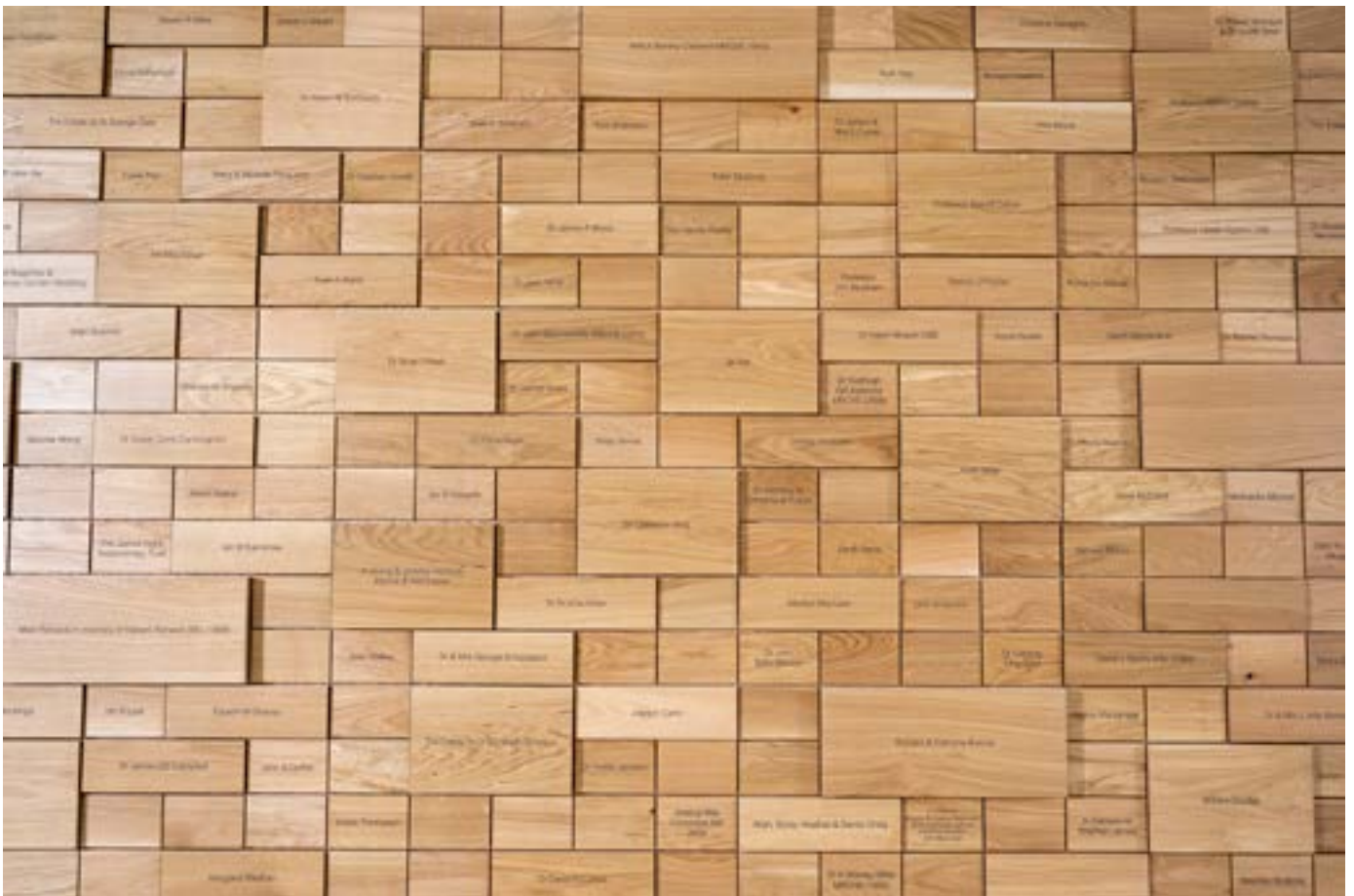
Our design mission was to bring the outside inside. We partnered with colleagues at the Scottish Community Development Centre and invited local community groups across Glasgow to work with us to co-design a community hub. Our new Community Engagement Coordinator, Susan Grant, has been having conversations with local groups who expressed concern at the on-going impact of the pandemic, the cost-of-living crisis, and the increased demand on services that face funding cuts. All of these pressing issues come at a time when communities and individuals are experiencing an increase in mental health issues especially amongst young people; isolation in older aged adult populations; digital inequality; the health impacts of obesity and reduced mobility; and food and fuel poverty.



Our ambition for the space sends a clear message that the School of Health & Wellbeing is committed to widening access to research by sharing our expertise and resources to support local organisations and respond to community needs. Local partnerships can help address power imbalances in research. A recent report published in July 2022 'An equitable future for research and innovation' from The Young Foundation's Institute for Community Studies commissioned by UK Research and Innovation in July 2022 said 'Whether local government, charities, community organisations or informal community networks and groups, non-research actors have been invited to participate, but are rarely given power over what and why knowledge is needed, how knowledge that affects them is created, or what knowledge is valued. The imbalance of power has ranged from inequality over decisions, even in well-intended partnerships aimed to produce knowledge about an issue, to grave issues of injustice where communities' experiences are used or 'exploited' in research.'



We are extremely grateful to the many donors whose support has enabled us to realise our vision.







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