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24 September 2021
The notion of co-production has achieved wide recognition, encoding a belief that research should be co-produced by researchers, public representatives, and policymakers/service managers. However, the term co-production covers a multitude of possibilities. For a start, most service interventions don’t go anywhere near a researcher; if you don’t believe me just read the publicly available board papers from NHS Institutions. These organisations are intervening all the time, but hardly ever mention research. Moreover, most co-production is based on an idea for an intervention emanating from academia that the service is willing to support. While not wishing to curtail any such evaluations, I have written repeatedly about the limitations of this model.[1-3] I argue that such interventions are likely to prove ephemeral, and that academic support and/or evaluation of interventions developed for the service, by the service, are much more likely to be sustained. I refer to this as reactive or opportunistic research.[4]

However, these considerations have led me to ponder more generally on the issue of sustainability. In our international work on leprosy, we have encountered many examples where an NGO has implemented self-help through a five-year project grant from a government of NGO. At the end of the five years, funding is cut-off. So, we are studying the sustainability of self-help interventions where funding came to an abrupt end about five years ago. The implicit theory is that the intervention would have become self-sustaining after five years. We will investigate this theory empirically in a retrospective study.

However, I propose a more general study of sustainability across a range of interventions that have been evaluated and which yielded positive findings. The plan would be to examine whether the intervention was still in place after a gap of about five years from the end of the intervention. We are still working out the

Collaboration for the Study of the Sustainability of Interventions with Positive Outcomes Published in Journals

Richard Lilford, ARC WM Director
study details and the purpose of this blog is to seek collaborators to co-write a protocol. I imagine that we would take a sample of studies, representing researcher-led interventions and interventions led by policymakers or service managers. In each case we would follow a standard method to determine the degree to which the intervention was sustained or even developed further. First, we would need to do some sort of scoping literature review of the general topic of sustainability.

The results will be highly relevant to research policy. My hunch is that it is generally better for the policy dog to wag the research tail, rather than the other way round.

References:

ARC WM Quiz

Plyushkin syndrome is named after the character Plyushkin in Nikolai Gogol’s novel, Dead Souls. It is also known as Diogenes syndrome, named after an ancient Greek philosopher, Diogenes of Sinope. In what way does this present in patients?

email your answer to: ARCWM@warwick.ac.uk

Answer to previous quiz: The psychological disorder Pica is characterised by eating items that have no nutritional value. It is usually seen in pregnant women, children and people who may have developmental disabilities. Congratulations to Bert Evans who was first to answer correctly.
The NIHR Health Services and Delivery Research (HS&DR) programme recently identified its most impactful projects. These included Willie Hamilton’s iconic studies into the reasons for worse cancer outcomes in England compared to other OECD countries (RP-PG-0608-10045). I recently had occasion to scrutinize the HS&DR publication journal, from 2015 to the present.

I selected nine reports, from the total of over 250, that I thought where most newsworthy. This was simply my opinion, and I invite ARC WM News Blog readers to identify their own selection and reasons.

The most common research methodology was mixed methods. In this category I would nominate the highly influential report by Naomi Fulop and colleagues on stroke units in London.[1] I was also struck by an article from the University of Manchester dealing with payment for performance in the north west of England.[2] This was a natural experiment, using a ‘difference in difference in difference’ approach. The main article was published in the New England Journal of Medicine.[3] I have to declare a conflict in interest, however, since my colleagues and I were the gallant runners up in the selection process. Although it would seem that, on this occasion, the selection panel got it right!

Among database studies, my nominations include a study showing a correlation between availability of opiate substitutes and deaths.[4] A further study by Griffiths and colleagues showed a relationship between nurse to patient ratios on the one hand and missed clinical observations and deaths on the other hand.[5] I particularly liked this study because it explicated a causal chain.

Among trials, I have three nominations. The first was Rupert Pearse’s step wedge trial of a method to reduce deaths after emergency laparotomy involving all the hospitals in England.[6] All the results were harvested from the Hospital Episode Statistics database. The result was null despite a high level of statistical power. I must declare an interest, as I was invited to advise on trial design. My other two selected trials both concern recidivism. One study examined the long term outcomes of a trial in nearly 700 people to prevent adolescent recidivism.[7] This study rendered a null result, but I found it particularly notable because it is one of very few studies into the sustainability of initially promising interventions (see previous article in this blog). The final study by Shaw and colleagues was a randomised trial of support for prisoners with mental health problems when they were released.[8] The study showed that the intervention prisoners remained in touch with their mental health support teams to a greater degree than controls.

Two purely qualitative studies stood out in my estimation. The first examined the reasons for low use of advanced care plans at the end of life.[9] The main barrier turned on the readiness of patients and their families to discuss the issue, and the capacity of organisations to sensitively recognise the propitious moment to start the conversation. Lastly, Young and colleagues...
carried out a sensitive study showing that the quality of life for deaf people could be improved by the use of sign language.[10]

As stated above, I would be delighted to hear of alternative or additional suggestions from our readers.

References:


The aphorism “publish or perish” describes existing pressures on academic researchers to publish research – in appropriate academic journals – to retain or advance their careers. The pressures on early career researchers to demonstrate their ability to publish before they obtain an academic job are increasing. A review of assistant professors hired between 2006 and 2018 finds a positive correlation between the year of they were hired and the number of publications they had, $r = .47$. This correlation was largely driven by later years, as people hired in 2006-2011 had on average 11 publications and people hired in 2012-2016 had on average 18 publications.

Logically, all researchers start with zero publications. Therefore, it must be possible to get one’s first and eventually 18th publication: but the academic publishing process is daunting.

The first Early Career Researcher Workshop aimed to demystify some aspects of the academic publishing process. Using ARC WM’s Zoom platform, the workshop started with a brief overview of academic publishing expectations and the journal submission/review process. Next, attendees were invited to write down two questions on a whiteboard. All questions were discussed. Storytelling was encouraged about negative and positive experiences. At the end of the workshop, attendees were made aware of opportunities available for international networking and mentorships.

Attendees posted a variety of questions (see Figure over page). Our discussions revealed challenges and opportunities early career researchers may encounter as they move through the publishing process. Some questions involved asking what they should do at different points in the submission process. For instance,
one question asked if they need to pay for publications. This led to a nuanced discussion about expectations across academic fields and publishing routes (green vs gold open access publishing). Other questions involved reflecting on how publications may influence one’s career trajectory. For instance, a question about journal ratings led to a thought-provoking discussion about what journal ratings really measure, and how some lower-ranked - but niche journals - may be appropriate publishing venues.

We shared opportunities for early career researchers on the ARC, including the Midlands Academy of Medical Sciences (AMS) Research Festival. Midlands AMS will seek poster and oral presentations from junior researchers in each of our institutions. The meeting is framed around three new Fellows – in this case, Richard Lilford, Arri Coomarasamy and Chris Brightling. They are open to getting abstracts (poster and/or oral) relating to pregnancy and reproduction, respiratory disease, and public health. At lunchtime, the attending researchers meet with the ‘expert’ Fellow for an informal discussion. Interested researchers can email arcwm@warwick.ac.uk.

University of Birmingham early career researchers may be interested to connect with the Health Research Exchange (HREx), which is designed to facilitate cross-national, cross-disciplinary conversations between health researchers (health services research, health management, health policy, public health; so largely non-clinical) in the form of seminars, workshops, and mentoring. It may help to build an international profile for your work. This network is especially important when international travel and funds have been so limited. Interested researchers can view the opportunity here: https://twitter.com/u21hrex.

The event was thought-provoking and supportive. The event was attended by 11 early career researchers across all partner institutions. We were glad to see attendees from PhD to assistant professor level. We look forward to bringing early career researchers together in future workshops and hope to see new faces there. The workshop schedule is provided below:

**Opportunities**

**Tuesday 14 September, 10:00 - 11:00**
**How to publish #write good**

**Wednesday 10 November, 14:00 - 15:00**
**Assertiveness**

**Friday 14 January, 13:00 - 14:00**
**Winning small grants**

**Thursday 17 March, 10:00 - 11:00**
**Grant finance #money matters**

**May TBC**

**Conclusions**
Many governments around the world are considering offering booster vaccinations against COVID-19 to their population. There are arguments, however, to prioritise primary vaccination in lower income countries ahead of booster vaccines in high income countries. While there is much to commend this argument, governments may nevertheless start to offer booster vaccination. We argue that if such vaccination programmes are implemented, then they should be carefully evaluated for effectiveness.

While previous vaccination programs have been evaluated in randomised, placebo-controlled clinical trials, there has been a noticeable paucity of trials comparing vaccines head-to-head or evaluating other aspects of vaccine policy. We have argued elsewhere for tracker trials to address these types of question. However, we think that the issue of booster trials is particularly pressing, in part because of the opportunity cost mentioned above, and in part because it is not certain that they are necessary.

Setting up a booster trial is not something that an individual university or research group can do. This is because vaccine trials are a matter of national policy. Therefore, a trial can only be established through government or one of its agencies. We therefore advocate for governments to commission research groups to design and evaluate any booster programs that they are minded to implement. The trial could be conducted among people of certain age groups, and/or who are at higher risk for other reasons. Ideally such a trial would be placebo-controlled and a factorial design could be used to include different types of vaccine, routes of administration or dose. If this does not happen, then a threshold analysis should be done. If the cut-off age is 50, then there should be a sudden increase in admissions and deaths at age 49.

References:
ARCW News Blog reader Gus Hamilton recently drew my attention to a magnificent randomised controlled trial covering 600 Chinese villages.[1] Over 20,000 people participated in a trial of regular salt versus a potassium containing salt substitute. The participants either had had a stroke, had high blood pressure, or were over 60 years of age (or a combination). Within five years there was a 14% reduction in stroke incidence in the potassium chloride salt substitute group. There was also a 13% reduction in major cardiovascular events, amounting to a difference of about seven events per thousand person years. This paper strongly supports previous reports in your News Blog.[2-4]

References:
3. Lilford R. Salt Intake and Health: Prospective Study Based on Morning Fasting Urine Samples from Over 100,000 People in 18 Countries. *NIHR CLAHRC West Midlands News Blog*. 24 May 2019.
Early in the COVID-19 pandemic, my colleague KK Cheng came out strongly in favour of face masks.[1-3] Chu, et al. then published a systematic review in the Lancet,[4] which corroborated his opinion. A recent large cluster trial involving villages in rural Bangladesh has now produced further strong evidence in favour of masks.[5] Over 340,000 adults from 600 villages were randomised to either a control arm or intervention arm where they received free masks (either surgical or cloth), were given information and saw role modelling from community leaders. Not only did mask wearing increase in the intervention arm (adjusted percentage point difference 0.29 [0.27, 0.31]), symptomatic seroprevalence was also reduced by 9.3% (adjusted prevalence ratio 0.91 [0.82, 1.00]). When looking specifically at surgical masks the overall relative reduction was 11.2%.

Prior to the pandemic there was already evidence that masks can reduce transmission of viruses. The evidence that this applies also to COVID-19 is now pretty much incontrovertible.

References:
There have been a lot of studies conducted looking at the impact of sugar on health, some of which we have looked at in our previous CLAHRC WM News Blog.[1] Earlier this year the US National Salt and Sugar Reduction Initiative (a partnership of over 100 health organisations) proposed a policy aimed at reducing national sugar consumption through industry reform and reducing total sugar for various packaged foods by 20% and sugar-sweetened beverages by 40%. A paper recently published in Circulation looked to evaluate the potential impact the proposed targets could have on health and finances.[2]

The authors used a microsimulation model based on a study population of US adults (aged 35-80) who provided data to three cycles of a National Health and Nutrition Examination Survey. The model was tailored to take into account estimated risk factors for type 2 diabetes and cardiovascular disease (CVD), as well as quality-adjusted life years, costs and cost-effectiveness of the policy over a ten year period, and over the lifetime of the cohort.

Results from the model suggest that achieving the desired targets could prevent almost 2.5 million incidents and ~500,000 deaths from CVD; ~750,000 cases of diabetes; gain 6.7 million QALYs; and save over $160 billion in net costs. The model estimated that the policy would become cost-effective by six years; and become cost-saving at nine years. Even with lower compliance from industry, results were still robust, according to further sensitivity analysis. The greatest gains were seen among Black and Hispanic Americans, those on lower income, and those who were less educated. (See also our previous CLAHRC WM News Blog on increased sugar taxes.[3])

References:

A recent article in the Economist proposed use of micro-forestation to reduce extreme heat in cities, and also to reduce pollution and improve aesthetics.[1] The Miyawaki method allows trees to grow very fast. Trees with long slim trunks would take up less than about two percent of the ground space in slums, but could provide a useful protective canopy. The idea would have to be tested with people who live in city settlements. Where they express approval experiments could be mounted.

The Miyawaki Method: A Method to Cool, Reduce Pollution and Perhaps Lower Stress in Urban Slums

Richard Lilford, ARC WM Director

Reference:
Congratulations

ARC WM’s Public Involvement Lead, Dr Magdalena Skrybant, has recently been appointed to the Board of Trustees of Picker Institute Europe. Picker is a leading international healthcare charity that carries out research to understand individuals’ needs and their experiences of care. Our congratulations to Magdalena.

Goodbye and Good Luck

This month we say farewell to Prof Aileen Clarke, Co-Theme Lead for ARC WM’s Public Health theme, who retires after 14 “very enjoyable and action-packed years at the University of Warwick.”

Aileen began working on wellbeing at Warwick, before moving into research and teaching in Health Technology Assessment and Screening. Later she branched out into ARC West Midlands and become Head of Division and Chair of Faculty.

Post-retirement Aileen is aiming to travel and see more of her new grandson. We wish her all the best.

Incorporating Equality, Diversity & Inclusion in PPI

The NIHR are hosting a webinar on incorporating equality, diversity and inclusion (EDI) into patient and public involvement, focussing on its importance, and how to overcome the barriers to applying it. They will also offer practical guidance, tips and resources on how to adapt a PPI programme to incorporate EDI successfully.

The event will be held at 2pm on 1 December 2021. For further information and to register please click here.

National NIHR ARC Newsletter

The August issue of the national NIHR ARC newsletter is now available online, with reports on peer-led meetings for those with long-term pain; the final report from ‘The Lost Voices’ campaign; and a new clinical trial looking at long COVID. There are also details of a number of upcoming online events.

To subscribe to future issues, please visit: https://tinyurl.com/ARCsnewsletter.
Growing Social Care Research in the West Midlands Event

The West Midlands Social Care Research Partnership are hosting a free half-day event on **Tuesday 19 October 2021** regarding *Growing Social Care Research in the West Midlands*.

For further information and to register, please click here.

This event is aimed at those passionate about improving social care services; those looking to develop their ideas for social care research and/or improving practice; and those aiming to understand more about how research is relevant to social care and how research can make a difference to social care practice.

The event will enable attendees to:

- Find out about how to develop research or practice improvement idea(s), and what support is available.
- Learn about funding opportunities available for social care research through the NIHR.
- Understand more about contemporary issues in adult social care and how research can impact social care practice.
- Network and connect with other researchers, practitioners, people with lived experience, commissioners and providers in the social care field.
- Attend a choice of in-depth sessions on key aspects of social care research and the research grant application process, to help take ideas forward.

Multi-disciplinary Housing and Care Research for People and Communities

Glen Garrod, Executive Director of Adult Care and Community Wellbeing at Lincolnshire County Council and former president of the Association of Directors of Adult Social Services (ADASS), has recently written about how a new vision for housing and social care research can enable people to transform their care and health, and be more independent. You can read their thoughts here.
Recent Publications


Pearce E, Jolly K, Harris IM, Adriano A, Moore D, Price M, Ross J. **What is the effectiveness of community-based health promotion campaigns on chlamydia screening uptake in young people and what barriers and facilitators have been identified? A mixed-methods systematic review.** *Sex Transm Infect.* 2021


Singh SP, Mohan M, Giacco D. **Psychosocial interventions for people with a first episode psychosis: between tradition and innovation.** *Curr Opin Psychiatry.* 2021; **34**(5): 460-6.


