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| WOLFSON INSTITUTE OF POPULATION HEALTH  NEWSLETTER  ISSUE 12: 29 APRIL 2022 | | | |
| **In this issue of our Wolfson Institute of Population Health Newsletter, we celebrate the achievements and work of staff and students in April.** | | | |
| FROM OUR DIRECTOR | | | |
| Dear All  As these Spring days (slowly) warm up and the trees are in full blossom, I’ve been attending more and more in-person meetings across our campus. These opportunities for more informal chats before and after the meetings are very welcome, and support for returning to work and hybrid working are regularly discussed. Please join our All-Staff meeting next Tuesday 3rd May for an update on our Wolfson Institute plans and investment to support hybrid working. | | | |
| Meanwhile, congratulations on all the excellent publications, grants and talks listed below, and a special mention for our four winners from the QMSU Education awards. Well done all!  Warm wishes    Fiona | | | A close-up of a person smiling  Description automatically generated |
| FROM OUR LEADERSHIP TEAMS AND REPRESENTATIVES | | | |
| **New WIPH PhD Student Rep**  Victoria Kemp (Research Manager)    We are delighted to announce that Aida Hassan has been elected to the role of new WIPH PhD Student Representative. Aida will be working closely with the Research Team and Director of Graduate Studies to ensure that student voices are heard within the institute, and to improve the student experience. She will head up a team of five student representatives, one from each centre. A call will go out for nominations for these five centre representatives shortly. | | | |
| GENERAL INSTITUTE NEWS | | | |
| **QMUL Public Engagement funding for the INCLUDED study**  1 April (Ratna Sohanpal, Beatriz Ratton, Sian Newton, Sandra Eldridge, and the INCLUDED team. Centres for Primary Care/Evaluation and Methods) | | | |
| WIPH researchers have received a QMUL Small Public Engagement grant to work on engagement activities with ethnic minority communities from three organisations: Social Action for Health, Caribbean and African Health Network, and South Asian Health Action. The engagement activities will help with recruitment and data collection for a qualitative study within the wider INCLUDED study. INCLUDED focuses on improving inclusion and diversity in UK clinical trials, through understanding how ethnicity data are collected, used, and reported, to enable  recommendations to be made to improve engagement with and impact of trials for under-served groups. | | Text  Description automatically generated | |
| **Quantima project to develop AI software for the interpretation of brain MRI in dementia**  4 April (Charles Marshall, Sheena Waters. Centre for Prevention, Detection and Diagnosis) | | | |
| Graphical user interface, text, application  Description automatically generated  Graphical user interface, text  Description automatically generated | | Funding in excess of half a million pounds from Innovate UK has been allocated to develop artificial intelligence software for the interpretation of brain MRI in dementia. The funds will be shared with industry partner *Ainostics*, and will enable improvement of the accuracy and timeliness of dementia diagnosis in memory clinics, and of patient selection and stratification for clinical trials of disease-modifying treatments for dementia. Dementia is the leading cause of death in the UK, but only 66% of those living with dementia have received a diagnosis. Current practice often necessitates years of follow-up before a non-neurodegenerative diagnosis can be confidently given. Part of the Project will include evaluation of a novel analysis platform, QUANTIMA (QUANtitative IMAging). | |
| **Does stress contribute to hypertension?**  4 April (Mohammad Talaei. Centre for Prevention, Detection and Diagnosis) | | | |
| Stress has been suggested as a contributing factor in the aetiology and progression of hypertension. The first [study](https://doi.org/10.1038/s41440-022-00895-3) to simultaneously investigate different aspects of perceived stress and evaluate their synergistic effect on hypertension has found that psychological distress had a significant positive relation with hypertension, that remained after full adjustment for other covariates. Individuals with high stress levels were 38% more likely to develop hypertension. Types of perceived stress that were significantly associated with hypertension, independent of sociodemographic and lifestyle covariates, were job conflict, job security, personal conflict, sexual life and daily life in both genders and financial problems in males. These findings underline the importance of identifying the effect of different sources of perceived stress to organize community-based strategies for the management of hypertension, and help health professionals prioritize and efficiently allocate resources for interventions. | | Headache | |
| **Genetic testing information for women with cancer predisposing genes**  5 April (Ranjit Manchanda, Ashwin Kalra, Sam Oxley, Michail Sideris, Monika Sobokan. Centre for Prevention, Detection and Diagnosis) | | | |
| Graphical user interface, application  Description automatically generated  Graphical user interface, application  Description automatically generated | | A new [patient information](https://engage.esgo.org/resources/genetic-testing/) booklet, written by WIPH authors, has been published by the European Network of Gynaecological Cancer advocacy Groups (ENGAGE), the patient and advocacy arm of European Society of Gynaecological Oncology. The booklet is currently available in English, with Hebrew and Italian translations underway. | |
| **QMSU Education Awards 2022**  6 April (Ruqia Osman, Elise Pohl, Ashwin Kalra, Andrew Harmer) | | | |
| Four WIPH staff and students were successful in the 2022 QM Student Union [Education Awards](https://www.qmsu.org/awards/education/). Ruquia Osman and Elise Pohl were the joint winners of the Course Rep collaboration award, Ash Kalra was awarded Academic Advice Champion, and Andrew Harmer won Student Voice Champion. Andrew, who is MSc Global Health (Distance Based Learning) lead, told us: *Being a student of a DBL programme student can sometimes be a lonely experience. By raising the profile of our course reps (with their own dedicated page on our program website), introducing bi-monthly meetings with course reps, SSLC meetings, and ‘town hall’ Q&A sessions, I hope to reassure our students that they are not alone, that they do have a voice, and that their concerns are heard and acted upon. I have big plans for our program, and am committed to ensuring that our students are at the centre of those changes*. | | Image preview    cid:image009.jpg@01D85A2B.C6EE01D0 | |
| **Sajid Javid faces pressure to release sugar reduction report**  6 April (Action on Sugar. Centre for Public Health and Policy) | | | |
| Graphical user interface  Description automatically generated | | In a [joint letter to Sajid Javid](https://www.sustainweb.org/news/apr22-soft-drinks-levy-sugar-reduction-letter/), Action on Sugar and 40 other health organisations, academics, and food groups called on the Government to stop delaying publication of the final report of the voluntary industry Sugar Reduction Programme. The final report is expected to provide further evidence of the success of the Soft Drinks Industry Levy, which removed 48,000 tonnes of sugar per year from soft drinks from 2015-2019. It is also expected to expose a dismaying lack of progress in most other product categories covered by the voluntary reduction programme. The letter points to “very worrying” recent increases in obesity prevalence in primary school children, and the urgency of addressing increasing health disparities which have been exacerbated during the Covid-19 pandemic. | |
| **Genetic testing for all women with breast cancer highly cost-effective in China**  6 April (Ranjit Manchanda. Centre for Prevention, Detection and Diagnosis) | | | |
| Unselected multigene testing at breast cancer diagnosis is reported to be cost-effective compared with family history/clinical-criteria-based testing in high-income countries. A new [study](https://www.mdpi.com/2072-6694/14/7/1839/pdf) evaluates the cost-effectiveness of three genetic testing strategies among breast cancer patients in China (a middle income country) using a microsimulation model at the individual level. Results show that offering unselected multigene testing to all breast cancer patients in China is highly cost-effective compared with either family history/clinical-criteria-based testing, or no testing, from both the societal and payer perspectives. For China, it may be more advantageous to move straight to unselected genetic testing from the current predominant situation of no testing. Co-author Ranjit Manchanda said: “*This is cost effective and can prevent thousands more cancers - more than 50% of carriers are missed by family history testing. It is now time to change policy in middle income and high income countries*.” | | cid:image011.png@01D85A2B.C6EE01D0 | |
| **Patient experiences of the Cytosponge test to detect Barrett’s Oesophagus**  7 April (Fiona Walter. Centre for Prevention, Detection and Diagnosis) | | | |
| The cytosponge capsule | | Oesophageal cancer has a bleak five year survival of 17%, but many cases are preceded by Barrett’s oesophagus, which provides an opportunity for early diagnosis. The BEST3 trial demonstrated the efficacy and safety of a Cytosponge cell collection device to detect Barrett’s oesophagus. In a nested study to understand primary care  patient experience, 1488 questionnaires and 30 interviews showed overall satisfaction with the Cytosponge test, with positive responses in particular relating to convenience, accessibility, staff’s interpersonal skills, and perceived technical competence. The most discomfort was reported during Cytosponge removal. About 80% would undergo the procedure again or recommend it to friends. This was true even for participants experiencing discomfort. These results will enable specific improvements to communications with patients, for example on how to better communicate test results. | |
| **Call for routine testing for underlying causes of high blood pressure in young adults**  9 April (Stuart Rison, Chris Carvalho, John Robson. Centre for Primary Care) | | | |
| Up to 30% of cases of persistently high blood pressure in young adults may be secondary hypertension, according to a *BMJ* [article](https://www.bmj.com/content/376/bmj-2021-067924), which notes that a delay of 2-4 years in diagnosing secondary hypertension is not uncommon. The paper sets out a suggested framework to investigate the most common conditions that cause high blood pressure in young adults, including thyroid dysfunction, renal parenchymal disease, and renal artery stenosis secondary to fibromuscular dysplasia, noting that for these conditions early treatment may prevent irreversible health damage from persistent high blood pressure, meaning younger patients are likely to have better outcomes. First author  Stuart Rison said: “Identifying and appropriately treating secondary hypertension early can be  hugely beneficial - A young patient with hypertension has more ‘at risk’ years of damage from high blood pressure, and some underlying conditions associated with secondary hypertension also have their own health consequences if left untreated.” | | Image preview | |
| **EUROGIN International Multidisciplinary HPV Congress, 2022**  10-12 April (Belinda Nedjai, Dorota Scibior-Bentkowska, Jack Cuzick. Centre for Prevention, Detection and Diagnosis) | | | |
| Image preview  A person standing behind a podium  Description automatically generated with medium confidence | | Three WIPH researchers presented at the EUropean Research Organisation on Genital Infection and Neoplasia (EUROGIN) 2022 conference in Dusseldorf from 10-12 April. Belinda Nedjai delivered six presentations and chaired one session.  Dorota Scibior-Bentkowska and Jack Cuzick also gave individual presentations. | |
| **Delivery of supported self-management in remote asthma reviews**  11 April (Imogen Skene, Liz Steed. Centre for Primary Care) | | | |
| During the COVID-19 pandemic, remote consultations became the norm for many conditions, including asthma reviews. Supported self-management in asthma care is a recommended intervention to reduce risk of acute attacks, and improve asthma control and quality of life. A [study](https://onlinelibrary.wiley.com/doi/epdf/10.1111/hex.13441) of 18 selected papers that explored self-management delivery during routine asthma reviews has found that support for self-management delivered remotely was acceptable (often more acceptable than in-person consultations), and a safe and effective alternative to face-to-face reviews. In addition, remote delivery of supported self-management was associated with increased patient convenience, improved access to and attendance at remote reviews, and offered continuity of care. The findings support the option of remote delivery of routine asthma care for those who prefer this, and offer healthcare professionals guidance on embedding supported self-management into remote asthma reviews. | | A close-up of a flashlight  Description automatically generated with medium confidence | |
| **What does the literature mean by social prescribing?**  11 April (Sara Calderon-Larranaga, Sarah Finer, Megan Clinch. Centres for Primary Care/ Public Health and Policy) | | | |
| Graphical user interface, text, application  Description automatically generated | | Social prescribing seeks to enhance the role of the voluntary and community sector in addressing patients' complex needs in primary care. In a critical literature [review](https://doi.org/10.1111/1467-9566.13468), WIPH authors explore how social prescribing is framed in scientific literature. The article demonstrates an oversimplification of the social determinates of health, and suggests an alternative ‘care-based’ framing of social prescribing which prioritises (and evaluates) holistic, sustained and accessible practices within strengthened primary care systems. A 3-minute video abstract is available [here](https://www.youtube.com/watch?v=kFAqNGOEf3k). | |
| **Personalised Ovarian Cancer Risk Prediction in an unselected population**  19 April (Faiza Gaba, Samuel Oxley, Ranjit Manchanda) | | | |
| Personalised ovarian cancer risk assessment combining genetic, epidemiological, and hormonal data in an unselected population has not previously been tested. In this qualitative [study](https://www.mdpi.com/2075-4418/12/5/1028), interviews were conducted with women in North East London who had received low (<5% lifetime) risk results in unselected population genetic testing for personalised ovarian cancer risk prediction. The study aimed to understand their attitudes and experiences, and the impact on their emotional well-being. Satisfaction with testing was high and none of the women expressed regret. The main facilitators were ease of testing, learning about children’s risk, and a desire to prevent disease, and barriers included change in family dynamics, insurance, stigmatisation, and personality traits associated with stress/worry. | | Genetic code | |
| **Address matching algorithm research recognised by HDR UK Impact Committee**  20 April (Gill Harper, Zaheer Ahmed, Kelvin Smith, John Robson, Carol Dezateux. Centre for Primary Care) | | | |
| Graphical user interface  Description automatically generated with low confidence  Graphical user interface, application  Description automatically generated | | A [paper](https://ijpds.org/article/view/1674) evaluating the ASSIGN address matching algorithm for allocating unique property reference numbers to GP recorded patient addresses has been selected as a case study and hailed as “impressive research” by the Health Data Research UK Impact Committee. Being able to link addresses across systems offers a valuable resource for health data science, and this research has developed an algorithm to accurately match addresses from health records to a reference database, providing a powerful tool for future work. The committee [noted](https://www.hdruk.ac.uk/case-studies/evaluation-of-the-assign-open-source-deterministic-address-matching-algorithm-for-allocating-unique-property-reference-numbers-to-general-practitioner-recorded-patient-addresses/): “*The incredible accuracy of the algorithm and the thoroughness of validation in a large population means that ASSIGN is likely to have a significant impact on research and, ultimately, patients*.” | |
| HIV among migrants in precarious circumstances in Europe20 April (Dominik Zenner. Centre for Public Health and Policy) | | | |
| A [review article](https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018(22)00032-7/fulltext) in the *Lancet* has assessed the challenges in responding to HIV burden and providing HIV care among migrants living in the EU and European Economic Area. Substantial gaps in data exist, particularly for those in precarious circumstances (eg. irregular status). Migrants have high rates of post-migration HIV acquisition, and higher HIV burden compared with the general population. They also face challenges in access to health and HIV services, with the most affected being irregular migrants, foreign-born key populations (eg. men who have sex with men, sex workers, and people who inject drugs), and migrants from sub-Saharan Africa. The authors conclude that ensuring equitable access to general health and HIV services, regardless of immigration status, and implementing interventions to reduce stigma and discrimination are crucial to the goal to end AIDS by 2030. | | A picture containing text, sign, green  Description automatically generated | |
| **Soluble thrombomodulin as a mortality predictor in hospitalised COVID-19 patients**  22 April (Peter MacCallum. Centre for Prevention, Detection and Diagnosis) | | | |
| cid:image022.jpg@01D85A2B.C6EE01D0 | | Over 15,000 COVID-19 patients have been admitted to Barts Health Hospitals during the pandemic. In this retrospective observational [study](https://doi.org/10.1111/ijlh.13855), 104 plasma samples collected from hospitalised covid patients within 72 hours of admission were analysed by the coagulation laboratory at the Royal London. Significantly higher levels of D-dimer, thrombin-antithrombin, soluble thrombomodulin, and tissue plasminogen activator-plasminogen activator inhibitor 1 complex were observed in non-survivors compared with survivors, but only increasing soluble thrombomodulin was significantly associated with mortality. These data support growing evidence that endothelial dysfunction plays an important role in COVID disease progression, but also show that soluble thrombomodulin, which can be rapidly assayed, is the best independent haemostatic predictor of mortality in hospitalised COVID patients. Co-author Peter MacCallum said “*Rapid measurement of soluble thrombomodulin may be useful in guiding personalized medicine for COVID patients*.” | |
| **GSK funds project to evaluate direct to patient genetic testing at cancer diagnosis**  25 April (Ranjit Manchanda, Rhian Gabe, Adam Brentnall, Fiona Walter, Samantha Quaife. Centres for Prevention, Detection and Diagnosis/Evaluation and Methods) | | | |
| GSK has provided funding of just under £1million for a three year project to commence from 1 May. Researchers will undertake research to establish and evaluate a Direct To Patient pathway for unselected genetic testing of all endometrial, colorectal, and ovarian cancer cases. The project will provide data on acceptability, uptake, and impact of testing on psychological wellbeing and quality of life. It is hoped these results will provide the basis for a strategy for precision medicine, early diagnosis, and prevention. Project lead Ranjit Manchanda said: “*This work will help to increase uptake of screening and prevention strategies in unaffected high risk women, leading to a reduction in burden of multiple cancers in the medium to long term*.” | | Graphical user interface, text, application  Description automatically generated | |
| **Letter to PM urges comprehensive mandatory salt reduction targets**  27 April (Action on Salt. Centre for Public Health and Policy) | | | |
| Graphical user interface, text, application, Word  Description automatically generated    A picture containing chart  Description automatically generated | A letter to the Prime Minister from Graham MacGregor, with 236 supporting signatories (including the Royal Society for Public Health, the Faculty of Public Health, Blood Pressure UK, Early Start Nutrition, Heart UK, and London Early Years Foundation) has urged the Prime Minister to prioritise comprehensive mandatory salt targets to ensure that the British food industry commits to salt reduction in the UK. As 75% of salt intake comes from processed foods, forcing responsibility for salt reduction on the individual is doomed to fail. The letter points to the 2004 Food Standards Agency policy of salt reduction targets across more than 80 categories of processed food, which resulted in population salt intake falling by 15% by 2011, with an annual estimated 9000 stroke and heart disease deaths prevented and a cost saving to the NHS of £1.5bn. Progress in salt intake has since stalled. The letter exhorts the PM to adopt the simple, cost-effective, and hugely impactful policy of mandatory salt targets to ensure progress towards preventing disease, reducing disparities, and building a sustainable NHS. | | |
| **Acceptability of a standalone leaflet for the Targeted Lung Health Check programme**  27 April (Samantha Quaife. Centre for Prevention, Detection and Diagnosis) | | | |
| Effective communication strategies that convey risks and benefits of screening, including unfamiliar concepts and outcome probabilities based on population risk, are critical to achieving informed choice, and mitigating inequalities in uptake. A [study](https://onlinelibrary.wiley.com/doi/epdf/10.1111/hex.13520) investigating the acceptability of a leaflet used to invite and inform eligible participants about the NHS England Targeted Lung Health Check programme has found that, while the leaflet appeared acceptable to the target population, there is scope to improve aspects of comprehension and engagement in ways that would support informed choice. Among their recommendations, the authors advise that a written information leaflet should not be used in isolation to achieve informed choice. Corresponding author Sammy Quaife said: “*Our suggested recommendations are based on findings within this screening programme, but could help direct the content of lung cancer screening information leaflets more widely, as well as broader multi-modal strategies for supporting informed choice as a distributed process*.” | cid:image034.png@01D85ADB.1CC8A9C0  cid:image036.jpg@01D85ADB.1CC8A9C0 | | |
| STAFF NEWS | | | |
| Welcome to Suzanne Scott, who has joined us this month as Professor of Health Psychology and Early Cancer Diagnosis. Suzanne will work closely with Fiona Walter and Stephen Duffy. At present she is based in room G007 at the Wolfson building in Charterhouse Square, although she is likely to move once the building is fully networked. | | Graphical user interface, text, application  Description automatically generated | |
| FORTHCOMING EVENTS | | | |
| **PINT OF SCIENCE EVENTS** | | | |
| **Why did pub landlords hand out free peanuts?** 9 May (Kat Jenner. Centre for Public Health and Policy)  Graphical user interface, text, application  Description automatically generated | | Come along to this [Pint of Science Talk](https://pintofscience.co.uk/event/have-i-gut-salty-news-for-you) and hear the surprising truth about the most ubiquitous ingredient in our food – salt: what it does to your body, whether all salt is ‘salt, and why it is one of the cheapest yet most valuable commodities in a food and drink company’s armour. | |
| **DIY Smear test at home**  11 May (Belinda Nedjai. Centre for Prevention, Detection and Diagnosis)    Graphical user interface, text, application  Description automatically generated | | What if I told you that you can do a simple yet highly sensitive smear test at home instead of a colposcopy at a clinic? I have developed a DIY test able to detect women with high-risk human papilloma virus who should attend a clinic for treatment. This test could be done on urine, making home testing a reality. The implementation of this technology will, potentially, increase uptake and reduce costs for the cervical cancer screening programmes whilst achieving high sensitivity to detect pre-malignant lesions. It’s empowering women and it’s a game changer for NHS. ([Event details here](https://pintofscience.co.uk/event/science-today-transforming-the-future-unraveling-the-past)) | |
| **Many thanks to all who so enthusiastically contribute. Please send any news items for the next newsletter to** [**j.a.mackie@qmul.ac.uk**](mailto:j.a.mackie@qmul.ac.uk) | | | |
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