24th Annual Health Promotion Conference Book of Abstracts, 18th June 2020

......

. .

Promoting health and wellbeing: creating a more equitable and sustainable environment



Conference committee 2020

| Conference co-chairs: | | |
|-------------------------|---|--|
| Dr Mary Jo Lavelle | Health Promotion Research Centre, NUI Galway | |
| Dr Lisa Pursell | Health Promotion Research Centre, NUI Galway | |
| | | |
| Committee members: | | |
| Sarah McCormack | Health and Wellbeing, Health Service Executive | |
| Cathryn Buckley | National Health Sustainability Office, Health Service Executive | |
| Dr Patricia Heavey | Association for Health Promotion Ireland | |
| Greg Straton | Health and Wellbeing Programme, Department of Health | |
| | | |
| Conference secretariat: | | |
| Dr Viv Batt | Health Promotion Research Centre, NUI Galway | |
| Nicola Fallon | Discipline of Health Promotion, NUI Galway | |

Special thanks to Dr Jane Sixsmith, Dr András Kolto, Professor Saoirse Nic Gabhainn (Health Promotion, NUI Galway) and Fiona Concannon (CELT, NUI Galway) who helped with the organisation leading up to the conference and to to all our colleagues who chaired plenary and parallel sessions and helped moderate the Zoom meetings on the day.

We gratefully acknowledge the support of the Health Service Executive, Department of Health, Moore Institute NUI Galway European Capital of Culture Seed Funding Award and the Association for Health Promotion Ireland for their contribution to this year's event.



Contents

| Welcome and Opening Address | 4 |
|---|----|
| Conference Programme | 6 |
| Biographies | 11 |
| Plenary Abstracts | 18 |
| Poster Abstracts | 21 |
| Parallel Themed Oral Presentation Abstracts | 31 |
| Useful Information | 67 |
| Contact Us | 68 |

Welcome

In association with our partners, Healthy Ireland, the Health Service Executive and the Association for Health Promotion Ireland, we are delighted to invite you to our 24th Annual Health Promotion Conference on June 18th 2020. This year's focus is on promoting health and wellbeing in order to create a more equitable and sustainable environment. This important focus incorporates concepts on ecological determinants of health and wellbeing, environmental sustainability and equity.

In response to the risks and travel restrictions associated with the COVID-19 pandemic we have transitioned this year's conference to a fully digital online format. This move is also timely and apt as it complements the conference sustainability theme through decreased collective consumption while maintaining a sense of open discourse and networking opportunities.

The conference themes on ecological determinants of health and wellbeing, environmental sustainability and social justice and equity are of the upmost importance for global health and wellbeing and there is now a more pressing need for research in these areas to inform policy and action. We are therefore delighted that researchers, practitioners and policy-makers involved in related areas of work are joining us to explore these themes and issues further.

Yours sincerely,

Dr Mary Jo Lavelle and Dr Lisa Pursell, Co-Chairs, 2020 Health Promotion Conference Committee





Opening Address

"Dear Conference Delegates,

Advancing the agenda on health and well-being is at the heart of the Agenda for Sustainable Development Goals and WHO's 13th General Programme of Work. It is about sustaining the pursuit of promoting human rights, eradicating deprivations across multiple dimensions, closing opportunity gaps, creating conditions for everyone to apply, and apply their potential. A far-reaching consequence is safeguarding the natural environment on which everyone depends on to ensure the well-being of current and future generations.

The Covid-19 pandemic has shed light on persistent inequities in health and wellbeing and the weak ability to protect health and sustain wellbeing, especially in low resourced settings. It has also brought to the surface hidden dimensions of inequities. Moreover, a Post COVID-19 situation is expected to exacerbate these inequities due to economic disruptions.

Advancing health and wellbeing requires a shift from putting individual health concerns to a broader agenda that considers aspects of individual and national wellbeing. This agenda would look at measures to provide equal prospects for accessing quality education and employment, decent living conditions, and access to innovation and technology for health and wellbeing for present and future generations. It should address persistent gender inequality; unequal access to quality health care and other essential services and exposure to disease and, take robust actions to build resilient societies and communities.

Promoting health and wellbeing should be about a shift from solely looking at health protection, promotion and disease prevention, to promoting wellbeing for and by all. To support this agenda on health and wellbeing, under the 13th GPW, WHO has set triple billion targets to be achieved by 2023. The Department of Health Promotion within the Division of Healthier Populations promotes actions to achieve the target of 1 billion individuals living healthier lives by 2023 by addressing the major global transitions regarding demography; urbanization; climate change; energy use; food systems and nutrition; epidemiological trends; and rapid technology/technological advancements."

by Dr Faten Ben Abdelaziz

Enhanced Wellbeing, Head of Unit of Enhanced Wellbeing, Department of Health Promotion, Healthier Populations, WHO-HQ Geneva



| Conference programme | | | | | |
|----------------------|---|--|--|--|--|
| Time | | | | | |
| 09.00 | Welcome to the 24th Virtual Health Promotion Conference (via Zoom webinar) | | | | |
| | Dr Mary Jo Lavelle and Dr Lisa Pursell (NUI Galway, Conference Co-Chairs) | | | | |
| | Dr Faten Ben Abdelaziz , (Enhanced Wellbeing, Head of Unit, Department of Health Promotion, Division of UHC/Healthier Populations, WHO-HQ Geneva). | | | | |
| | Dr Stephanie O'Keeffe , (National Director, Strategic Planning and Transformation, Health Services Executive) | | | | |
| | Kate O'Flaherty (Head of Health and Wellbeing, An Roinn Sláinte, Department of Health) | | | | |
| | | | | | |
| | Plenary 1 | | | | |
| 09.30 | Gaia: The ultimate setting for health promotion(via weblink)Dr Trevor HancockProfessor and Senior Scholar, School of Public Health and Social Policy, University of Victoria, Canada | | | | |
| 10.00 | <i>Extinction thwarted: surviving global warming</i> (via weblink) Professor Sharon Friel | | | | |
| | Professor of Health Equity, School of Regulation and Global Governance (RegNet), Australian National University | | | | |
| 10.45 | Coffee break and poster competition (via weblink) | | | | |
| | (Posters are available for viewing online during all breaks) | | | | |



| Time | | | | |
|-------|--|--|--|--|
| | Parallel Themed Oral Presentations | | | |
| 11.00 | Theme 1: Health equity and sustainability(via weblink) | | | |
| | Meeting Chair: Dr Colette Kelly, NUI Galway | | | |
| | Community heart projects: supporting disadvantaged communities access to and knowledge of sustainable food production and its link to cardiovascular health Janis Morrissey, Head of Health Promotion, Information and Training, Irish Heart Foundation | | | |
| | Baby food made easy - increasing parental confidence to make home-made baby | | | |
| | food Dr Fiona Moloney, Senior Primary Care Dietitian, Health Service Executive (HSE), Dublin South, Kildare & West Wicklow Community Healthcare | | | |
| | Produce on the inside: personal experience of facilitating a gardening group within a mental health service in a prison Gráinne Carley, Occupational Therapy, Health Service Executive | | | |
| | Community at the heart of an eco-social approach: co-developing a toolkit for mapping ecosystem services, health and sustainability Ann Marie Crosse, PhD Candidate, Discipline of Health Promotion, NUI Galway, and Health Service Executive | | | |
| 11.00 | Theme 2: Adaptation in a changing environment for health risks(via weblink) | | | |
| | Meeting Chair: Professor Saoirse Nic Gabhainn, NUI Galway | | | |
| | PIER pressure: what lurks beneath the surface? Dr Liam Burke & Dr Sinead Duane , Bacteriology, NUI Galway | | | |
| | Green healthcare – waste, water and benchmarking Eileen O'Leary, Lecturer, Clean Technology Centre, Cork Institute of Technology | | | |
| | Does making the invisible radioactive gas radon "visible", through the use of digital monitors, increase remediation rates among householders? Stephanie Long, Senior Scientist, Environmental Protection Agency | | | |
| | Child and adolescent measures for planetary health Divya Ravikumar, Research Assistant, Health Promotion Research Centre, NUI Galway | | | |
| | Food, balancing population and environmental health Dr Martin O'Donnell , NUI Galway | | | |
| | | | | |

| Time | | | |
|-------|---|--|--|
| 11.00 | Theme 3: Healthy cities and green and blue infrastructure(via weblink) | | |
| | Meeting Chair: Sarah McCormack, Health Service Executive | | |
| | Healthy Places, Healthy Children Anne McCusker, Programme Manager, Belfast Healthy Cities 'Healthy Placemaking' in the Regional Spatial and Economic Strategy for the Eastern and Midland Region, Ireland: the role of green and blue infrastructure Dr Owen Douglas, EU Project Officer, Eastern and Midland Regional Assembly, Ireland | | |
| | | | |
| | Connecting health protection and health gain in the planning and development process Andrew Sulley, Environmental Health Officer, Health Service Executive | | |
| | Green spaces for health in Cork City Maria Young, Co-ordinator Green Spaces for Health | | |
| | GOGREEN ROUTES: a study programme protocol of nature connectedness promotion on health, wellbeing and sustainability Cassandra Murphy, Research Associate, GOGREEN ROUTES H2020 project, Health Research Institute, University of Limerick | | |
| 11.00 | Theme 4: Health and physical activity and active transport (via weblink) | | |
| 11.00 | Meeting Chair: Dr Patricia Heavey, Athlone Institute of Technology | | |
| | GOGREEN ROUTES: a study programme protocol of sustainable physical activity | | |
| | promotion | | |
| | Dr Tadhg E. MacIntyre, Lecturer, Lead GOGREEN ROUTES H2020 project, Health Research Institute, University of Limerick | | |
| | Promoting physical inactivity and car dependence: the case of Waterford city's suburbs | | |
| | Dr Elaine Mullan, Lecturer, Waterford Institute of Technology | | |
| | Context and role of travel behavioural change in supporting healthier and more resilient futures Dr Lorraine D'Arcy, Senior Lecturer & Sinead Flavin , Assistant Lecturer, Technological University Dublin | | |
| | Commoovity – moving the community | | |
| | Brendan Meskell, Colm Walsh, James Walsh, Kathleen Jacobi, Matthew McGuinness. MSc in Transport and Mobility students, Technological University Dublin | | |
| | Promoting cycling for transport: home truths and fallacies Dr Elaine Mullan, Lecturer, Waterford Institute of Technology | | |

| Time | | | |
|--|---|--|--|
| 11.00 | Theme 5: Green prescriptions / meaning of health and nature(via weblink) | | |
| | Meeting Chair: Cathryn Buckley, National Health Sustainability Office | | |
| Connecting with nature to benefit health and wellbeing Dr Gesche Kindermann, Dr Catriona Carlin, & Dr Easkey Britton, Post d researchers, Near Health Project, Microbiology, NUI Galway | | | |
| | A walk in the woods' An intervention for individuals with severe mental illness Fran Ronan & Dr C. Losty, Lecturer, Department of Sport and Exercise, Waterford Institute of Technology | | |
| | Woodlands for Health – a nature-based intervention programme focused on green exercise in a forest setting Aisling Doherty, Mental Health Promotion Manager, Mental Health Ireland | | |
| | Can access to green spaces during parkrun events contribute to the positive mental health of the participants? A literature review Allison Dunne, PhD Candidate, Sheffield Hallam University, UK | | |
| The meaning of open water swimming for adults in Ireland Edel Murray, Discipline of Occupational Therapy, NUI Galway | | | |
| 11.00 | 0 Theme 6: Equitable governance structures for sustainable healthy communities and environments (via weblin | | |
| | Meeting Chair: Dr Martin Power, NUI Galway | | |
| | Insights from ENERGISE Professor Frances Fahy, Geography, NUI Galway | | |
| | GAA green clubs – the politics of place in the management of space Dr Míde Ní Shúilleabháin, Sustainability Officer, Croke Park Stadium | | |
| | Climate change, health and Cork City: a dialogue for action Denise Cahill , Healthy Cities Coordinator Cork | | |
| | Mapping the Food System in Cork City - the first steps Dr Janas M. Harrington, Chair, Cork Food Policy Council; Senior Lecturer, School of Public Health, UCC | | |
| | The Food–Environment Policy Index (EPI): monitoring and benchmarking government policies and actions to improve the healthiness of food environments in Ireland | | |
| | Clarissa Leydon, School of Public Health, University College Cork | | |
| | teractive Q & A session - discussion of the parallel theme presentations | | |
| 12.15 | Interactive Q & A for the parallel theme presenters (via Zoom meetings) | | |
| 12.45 | Lunch | | |
| 13.50 | Stretch session with Mark O'Malley,Physical Activity Specialist, Teach Solais LGBT(via weblink) | | |

| Time | | | | | |
|--|---|--|--|--|--|
| P | Plenary 2 | | | | |
| 14.00Environmental health inequalities across Europe: evidence for action(via (via Matthias Braubach, Technical Officer, World Health Organization (WHO) F Office for Europe, European Centre for Environment and Health | | | | | |
| | Food sharing: contributions to health, wellbeing and sustainability (via weblink) Professor Anna Davies, Professor and Chair of Geography, Environment and Society, Trinity College Dublin | | | | |
| | Plenary 3 | | | | |
| 15.15 | Expert Keynote Panel Response to Delegate Questions(via Zoom webinar)Delegates can submit questions on twitter @HPRC_NUIG throughout the day or to the Plenary Chair (via the chat function) during the Zoom meeting | | | | |
| | Plenary Chair: Professor Margaret Barry, Global President, International Union for Health Promotion | | | | |
| Panellists: | | | | | |
| | Dr Trevor Hancock, Professor and Senior Scholar, University of Victoria, Canada | | | | |
| | Matthias Braubach, Technical Officer Urban Health and Equity, WHO Regional Office for Europe | | | | |
| | Professor Anna Davies, Professor of Geography, Trinity College Dublin | | | | |
| | Dr Faten Ben Abdelaziz, Head of Enhanced Wellbeing Unit, WHO Head Quarters, Geneva | | | | |
| Sarah McCormack, National Lead for Healthy Ireland, Health Service I | | | | | |
| | Greg Straton, Assistant Principal Officer, Health and Wellbeing Unit, Department of Health | | | | |
| | Peter Smyth, Assistant National Director of Estates, Health Service Executive | | | | |
| | Dr Patricia Heavey, Chairperson of the Association for Health Promotion Ireland. | | | | |
| | Presentation of the AHPI poster and social media prizes. | | | | |
| 16.00 | Concluding remarks | | | | |
| | Professor Ciarán Ó hÓgartaigh, President, National University of Ireland Galway | | | | |
| 16.15 | Conference close Dr Mary Jo Lavelle and Dr Lisa Pursell (NUI Galway, Conference Co-Chairs). | | | | |

Biographies

Plenary speakers' biographies

Professor Trevor Hancock

Professor and Senior Scholar, School of Public Health and Social Policy, University of Victoria, Canada

Trevor Hancock is a public health physician and recently retired from his position as a Professor and Senior Scholar at the School of Public Health and Social Policy, University of Victoria.

In the 1980s he helped to create the global healthy cities movement, and has been an internationally recognised leader in this area for more than 30 years, often drawing attention to the links between healthy and sustainable communities.

He has been a leader on issues of health and the environment for decades, co-founding the Canadian Association of Physicians for the Environment in 1993. In 2012 he was asked to lead a Canadian Public Health Association Task Force that produced a comprehensive 2015 report on the ecological determinants of health. In recent years he has focused on the concept of a 'One Planet' community/ region as a way to integrate the concepts of healthy and sustainable communities, and in retirement has started a new NGO, Conversations for a One Planet Region, to explore and popularise these ideas locally.

He has published extensively on these ideas in the academic and professional literature and is frequently in demand as a speaker. He was made an Honorary Fellow in the UK's Faculty of Public Health in 2015 and in 2017 was awarded the Defries Medal, the CPHA's highest award, presented for outstanding contributions in the broad field of public health.

Professor Sharon Friel

Professor of Health Equity, School of Regulation and Global Governance (RegNet), Australian National University

Sharon Friel is Professor of Health Equity and Director of the Menzies Centre for Health Governance at the School of Regulation and Global Governance (RegNet), Australian National University. She was Director of RegNet from 2014-2019.

Sharon is a Fellow of the Academy of Social Sciences Australia and co-Director of the NHMRC Centre for Research Excellence in the Social Determinants of Health Equity. She was the Head of the Scientific Secretariat (University College London) of the World Health Organization Commission on Social Determinants of Health between 2005 and 2008. In 2014, her international peers voted her one of the world's most influential female leaders in global health.

Sharon's interests are in the political economy of health; governance, policy and regulatory processes related to the social determinants of health inequities, including trade and investment, food systems, urbanisation, climate change. Her recent book "Climate Change and the People's Health" was published by OUP in Jan 2019.





Plenary speakers' biographies

Matthias Braubach

Technical Officer Urban Health and Equity, European Centre for Environment and Health, WHO Regional Office for Europe

Matthias Braubach is an urban geographer and Master of Public Health. Matthias works as "Technical Officer Urban Health and Equity" in the European Centre for Environment and Health of the WHO Regional Office for Europe, and is currently acting as Programme Manager for the Environment and Health Impact Assessment programme.

His work priorities address the assessment of health impacts of environmental risks in urban settings, and the development of guidance on healthy urban planning. In recent years, a focus of work has been put on urban green and blue spaces and their health benefits. A second line of work describes the unequal distribution of environmental risks within European societies, and has led to the publication of the second WHO European assessment report on environmental health inequalities and a related resource package for national and local actors.

Professor Anna Davies

Professor of Geography, Trinity College Dublin

Anna Davies is Professor and Chair of Geography, Environment and Society at Trinity College Dublin where she directs the Environmental Governance Research Group and is on the steering committee for the Trinity Centre for Future Cities.



Anna is a member of the Royal Irish Academy and the International Science Council, as well as being a committee member of the European Roundtable on Sustainable

Consumption and Production. In addition, Anna has advised the Irish Government on matters of environmental governance in her roles as an independent member of the National Economic and Social Council (2011-2015) and as a member of the Climate Change Advisory Council (2015-2020). Anna is a member of the Board of Directors of The Rediscovery Centre (2009-), a social enterprise dedicated to supporting transition to a circular economy.

Widely published, Anna has produced more than 100 policy reports, peer reviewed books, book chapters and journal articles and is currently the Principal Investigator of a Europrean Research Council Consolidator Grant entitled SHARECITY. In 2018, the Irish Research Council gave her the Researcher of the Year award.



Other contributors biographies

Dr Faten Ben Abdelaziz

Enhanced Wellbeing, Head of Unit of Enhanced Wellbeing, Department of Health Promotion, Healthier Populations, WHO-HQ Geneva

A main area of Faten's work is reducing inequities in health and wellbeing; and sustainable development using health promotion tools and approaches in multiple contexts including emergencies. Mainstreaming health in all policies and multi stakeholder's engagement for co-designed and co-implemented solutions to promote health and wellbeing for all.

From 2016 to 2019, she has been heading the Unit of Health Promotion at Global level and from May 2008 to 2016, she has served as a Regional adviser for health education and promotion at the WHO Regional Office for the Eastern Mediterranean region (EMRO). In this role, she has been providing technical support to member states in policies and programmes development in areas of health promotion, health promotion at city level, health literacy, social mobilization and risk communication in various settings including schools and cities and covering multiple risk factors linked to noncommunicable diseases (childhood obesity and physical inactivity), social determinants of ill health, reproductive health.

From 2002 to 2008, Dr Ben Abdelaziz was technical officer, at the WHO Centre for Health Development working on the areas of health promotion, urbanization and health and health equity, women's health and gender and social determinants of health.

Dr Stephanie O'Keeffe

National Director, Strategic Planning and Transformation, Health Services Executive

Dr Stephanie O'Keeffe is National Director of Strategic Planning and Transformation in the HSE. She has an MSc in Psychological Research Methods and Assessment and a PhD in Psychology. Stephanie was previously the National Director of Health and Wellbeing in the HSE and the first Director of the Health and Wellbeing Programme in the Department of Health. She is a former Director of the Crisis Pregnancy Programme where she worked for ten years.

Peter Smyth,

Assistant National Director of Estates, Health Service Executive

Peter Smyth BE, CEng, MIEI, Chartered Engineer and Member of the Institute of Engineers of Ireland.

Peter is Assistant National Director of Estates with responsibility for one of four geographical Estates regions in Ireland. The role involves responsibility for the procurement , management and delivery of all capital projects in the region, including a multi-annual infrastructural risk programme and also for the management of the regional Health Property Portfolio and for the provision of Sustainability and Energy advisory and programme management services.

Peter has a particular interest in Sustainability and Energy Conservation and led on the implementation of an Energy Efficient Design (EED) approach in healthcare buildings in Ireland. This approach is achieved through the incorporation of EED principles into all Projects through the active structured participation of all design team members with client reviews from initial design stage to completion. He is lead for the implementation of Regional Health Energy Bureaus in partnership with the Sustainable Energy Authority of Ireland (SEAI).





Other contributors biographies

Kate O'Flaherty

Head of Health and Wellbeing, An Roinn Sláinte, Department of Health

Kate O'Flaherty is Head of Health and Wellbeing in the Department of Health. She leads the cross-Government Healthy Ireland programme, which coordinates the implementation of the national framework for improved health and wellbeing in Ireland. Kate originally qualified as a pharmacist, and worked in healthcare and professional regulation for many years before joining the Department in 2013 to take up the Healthy Ireland role.

Kate also holds a Masters in Journalism and previously worked in health specialist communications roles for national media.

Final Plenary Chair: Professor Margaret Barry,

Global President, International Union for Health Promotion and Education

Margaret M. Barry, Ph.D., holds the Established Chair in Health Promotion and Public Health, and is Head of the World Health Organization Collaborating Centre for Health Promotion Research, at the National University of Ireland Galway. Professor Barry has published widely in health promotion and works closely with policymakers and practitioners on the development, implementation and evaluation of mental health promotion interventions

and policies at national and international level. Professor Barry has extensive experience of coordinating international and European collaborative projects, serving as project leader on WHO projects and European Union funded research initiatives. Professor Barry also serves on a number of international and European steering groups and scientific committees and has acted as expert adviser on mental health promotion policy and research development in a number of countries around the world. Professor Barry was re-appointed in 2016 for a second term to the European Commission Expert Panel on Effective Ways of Investing in Health (2016-2019) and was elected as global President of the International Union for Health Promotion and Education in 2019.

Conference Closing Speech: Professor Ciarán Ó hÓgartaigh, President, National University of Ireland Galway

Ciarán Ó hÓgartaigh became the 13th president of NUI Galway in January 2018. Previously, he was Professor of Accounting and Dean of Business at UCD, leading its schools in Dublin (UCD Lochlann Quinn School of Business, UCD Michael Smurfit Graduate Business School and UCD Smurfit Executive Development) and its overseas programmes in Hong Kong, Singapore and Sri Lanka.

Having attended Scoil Iognáid and Coláiste Iognáid, Ciarán is a first class honours, first in class graduate of NUI Galway. He trained as a Chartered Accountant with Arthur Andersen and has a PhD in Accounting from the University of Leeds. He has been published widely in the accounting field and has previously held academic positions at Dublin City University, UCD and Victoria University of Wellington, New Zealand. A former Fulbright scholar at Northeastern University, he has served as Audit Committee Chair at the Department of Marine, Communications and Natural Resources and is a member of the Audit Committee at the Department of Finance.







Centre at NUI Galway, which is a World Health Organization (WHO) Collaborating Centre. Dr Lavelle has conducted sustainability research in Ireland, UK and New Zealand with a focus on pro-environmental behaviours, sustainable energy transitions in households, businesses and transport systems, as well as policy implications and knowledge translation of sustainability, quality of life and energy-efficiency research

on a national scale. Dr Lavelle has published articles in peer-reviewed journals including Global

Dr Lisa Pursell,

Research

Head of Discipline, Health Promotion, National University of Ireland Galway

Environmental Change, Quality in Ageing and Older Adults, and Irish Geography.

Lisa Pursell PhD is currently Head of Discipline of Health Promotion, in the School of Health Sciences and member of the Health Promotion Research Centre at NUI Galway. She has previously worked in the areas of antimicrobial research and veterinary epidemiology before focusing on health promotion and health equity.

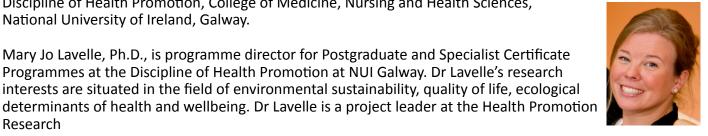
Lisa has published in the areas of health impact assessments, health equity and workplace ill treatment. Her current research interests include human and non-human animal interactions.

Sarah McCormack,

National Lead for Healthy Ireland, Health Service Executive

Sarah has led the development of the first Healthy Ireland Implementation Plan for the Health Service – Healthy Ireland in the Health Services 2015 – 2017. She works closely with the Department of Health supporting the implementation of the Healthy Ireland Framework 2013 – 2025 and with the Department of Community and Rural Development for Healthy Cities and Counties. Having worked previously in the HSE Clinical Strategy & Programmes she is an advocate for promoting health and wellbeing, and the creation of opportunities where each one can playing a key role in developing healthy communities. Sarah holds many qualifications in Project Management and Change Management with an MSc in Leadership and Management





Conference committee members

Dr Mary Jo Lavelle, Conference Co-Chair,

Discipline of Health Promotion, College of Medicine, Nursing and Health Sciences, National University of Ireland, Galway.

Mary Jo Lavelle, Ph.D., is programme director for Postgraduate and Specialist Certificate Programmes at the Discipline of Health Promotion at NUI Galway. Dr Lavelle's research interests are situated in the field of environmental sustainability, quality of life, ecological



24rd Health Promotion Conference 2020

Conference committee members

Dr Patricia Heavey,

Programme Co-ordinator and Lecturer Nutrition and Health Science, Department of Sport and Health Sciences, Athlone Institute of Technology

Dr Patricia Heavey is the Chairperson of the Association for Health Promotion Ireland (AHPI). The AHPI is the only professional association in Ireland specifically for people interested or involved in the fields of health promotion practice, health promotion education and research.

Cathryn Buckley,

Office Coordinator, National Health Sustainability Office (NHSO), Health Service Executive

The NHSO develops and implements national sustainability strategies within the Health Service, engaging staff, patients and the public in relation to sustainability, climate action and its impact on health.

She trained as an architectural technologist and has a master's degree in advanced environmental and energy studies. She is a Certified Energy Manager and member of the Association of Energy Engineers. She also has a background in media and communications and previously worked as

Communication and Change Specialist for the HSE's national finance reform programme.

Greg Straton,

Assistant Principal Officer, Health and Wellbeing Unit, Department of Health

Before joining the Civil Service, he was the CEO of Treoir and previously the CEO of the Spiritan Asylum Services Initiative (SPIRASI). He was a member of the Working Group to review the Protection Process for asylum seekers which formulated the McMahon report. Greg holds an Honours Degree in Public and Development Management from the University of Stellenbosch in his native South Africa and recently completed an MSc in Healthcare Leadership at the Irish Management Institute.









Plenary abstracts

Plenary 1 abstracts

Gaia: the ultimate setting for health promotion

Professor Trevor Hancock

The greatest challenge to health we face in the 21st century - even greater than climate change – is the Anthropocene. The massive and rapid increase in our economic and social development, combined with dramatic growth in the human population and the power and ubiquity of our technology has created massive and rapid changes in the Earth's natural systems. Since these systems are the ecological determinants of our health, and underpin our societies and economies, this is a profound, even existential challenge.

In this presentation I will provide an overview of the Anthropocene and its health implications, including the very real danger it will heighten social inequality and health inequity. This calls for a transformative eco-social response if we are to address the unprecedented challenges we face. We need a complete re-thinking of core societal values and practices; we will have to reinvent our economic system, our laws and policies to put human and planetary health and social justice at the centre of decision-making. At the local level, we will need to become 'One Planet' cities and communities.

Throughout the presentation I will suggest the implications of all this for health promotion.

Extinction thwarted: surviving global warming

Professor Sharon Friel

Climate change threatens humanity and the planet on which we live. Social inequities, including startling variance in the health outcomes that different population groups enjoy, also pose a threat to humanity, although less directly. Together, the scale of devastation these threats pose is unprecedented but wholesale destruction is not inevitable. Humanity can and must act to prevent catastrophic climate change and redress egregious global health inequities. It must act now. With a focus on disrupting the existing 'consumptagenic system', this talk outlines some of the steps necessary to move from inertia towards effective and equitable climate change adaptation and mitigation through progressive public policy, sustainable business models and effective social mobilisation.

Plenary 2 abstract

Environmental health inequalities across Europe: evidence for action Matthias Braubach

Environmental conditions are a major determinant of health and well-being, but they are not shared equally across the population. Higher levels of environmental risk are often found in disadvantaged population subgroups. Recent work by the WHO Regional Office for Europe has explored the unequal distribution of environmental risks and injuries within countries and shows that undue disparities in environmental conditions, risk exposures and related health outcomes affect citizens daily in all settings where people live, work, travel and spend their time.

The magnitude of environmental health inequalities within countries is documented by 19 inequality indicators on urban, housing and working conditions, basic services and injuries. Inequalities in risks and outcomes occur in all countries in the WHO European Region, and the latest evidence confirms that socially disadvantaged population subgroups are those most affected by environmental hazards, causing avoidable health effects and contributing to health inequalities. In many cases, socially disadvantaged groups are five times more likely to be exposed to environmental hazards, but environmental disadvantage can also be associated with sex, age, ethnicity, location of residence or household composition.

The data compiled prove that environmental health inequalities have not been managed and addressed successfully in many European countries, as there are several environmental risks for which exposure inequalities have been increasing over recent years. In the context of COVID-19, some inequalities are likely to increase in relevance, such as, overcrowding and housing conditions, water supply and hygiene, and access to green spaces. Disadvantaged groups may be exposed to higher stress levels during the lockdown period. However, another concern shared across the WHO European Region is the lack of data on inequalities in environmental conditions, restricting a more detailed assessment of environmental justice issues in many countries.

The project findings call for more environmental and intersectoral action to identify and protect those who already carry a disproportionate environmental burden. The availability of stratified data on exposure to environmental risks is a pre-condition for addressing inequalities, and there are different ways that data can be utilized to document inequalities and adjust action accordingly. Equitable, accessible and healthy urban environments are one of the key aspects to mitigate environmental health inequalities, and various sectors and stakeholders can play a contributory role to promote health and wellbeing through creating equitable and sustainable local environments.

Food sharing: contributions to health, wellbeing and sustainability

Professor Anna Davies

Food lies at the heart of our lives. It is vital for our health and survival, and links us to our natural and social environments in unique ways. But our food system is currently unsustainable. New ways to ensure future food security without treating people and the planet unfairly must be found. Novel means of sharing food using information and communication technologies such as websites, social media platforms and apps claim to offer one way of reorienting food systems onto sustainable pathways, but these claims are rarely assessed and the value of their activities often goes unnoticed. In this presentation I will explore how the goals and impacts of collective growing through community gardens resonates with established means of supporting health and wellbeing; the wheel of wellbeing developed by SLaM. I will identify challenges that community gardens currently experience and provide potential means to resolve those challenges.

Poster communication abstracts



Poster Competition The AHPI will be presenting an award for the best poster in the final plenary

Poster Communications

| # | Presenter | Title | |
|---|--|---|--|
| 1 | Dr Tadhg Macintyre and Linda Bhreathnach University of Limerick, GO GREEN | Nature moves: an investigation into exercise in green spaces as a mental health intervention | |
| 2 | Dr Catherine Conlon, Human Health and Nutrition, Safefood | Modern culture and wellbeing – towards a sustainable future | |
| 3 | Dr Sarah Cullivan, Respiratory Department, Mater Misericordiae University Hospital, Dublin | Animal content in commonly prescribed medicines | |
| 4 | Dr András Költő, Aoife Gavin and Professor Saoirse Nic Gabhainn, Health Promotion, NUI Galway | Modes of transport to or from school and mental wellbeing of schoolchildren in Ireland | |
| 5 | Dr Clare Donovan <i>et. al.</i> Food Safety Authority of Ireland | Mighty meaty feast – monitoring the salt content of processed meat in Ireland since 2003 | |
| 6 | Dr Sergio Calonge Pascual, <i>et. al.</i> ImFINE Research Group, Department of Health and Human Performance, Faculty of Physical Activity and Sport Sciences-IN- EF. Universidad Politécnica de Madrid, Spain. | y strategies of physical activity on prescription in the | |
| 7 | Clodagh Qualter, Lisa Hanlon, Healthy Campus and Dr Patricia Heavey, Athlone Institute of Technology | Students' attitudes and smoking behaviours following the implementation of tobacco-free campus in Athlone Institute of Technology: a cross-sectional study | |
| 8 | Dr Uzair Akbar Ali, Department of Medicine, University Hospital Waterford | Tobacco cessation in cardiovascular disease management of acute coronary syndrome (ACS) | |

Nature moves: an investigation into exercise in green spaces as a mental health intervention

Authors and affiliation: Dr Tadhg Macintyre Lecturer and Linda Bhreathnach, University of Limerick, GO GREEN

Spending time being active in Nature has been shown to have positive effects on mental health (Passmore & Haltmore, 2016). With the aim of addressing a gap in the literature, researchers conducted a nationwide study garnering qualitative and quantitative data. The study investigates and explores nature interventions for mental health. This was done with the aim of gleaning data which may help to inform a public health approach to mental health. To achieve the study aims, researchers created an online call to action via social media platforms. Researchers partnered with Mental Health Ireland and Sports Ireland to implement a nationwide initiative inviting participants to engage with nature as a mental health intervention. Participants were recruited via social media and were interviewed about their experience. The results are discussed in relation to current literature with recommendations for public policy.

Don't forget to tweet during the day #HPRC2020

Modern culture and wellbeing - towards a sustainable future

Author and affiliation: Dr Catherine Conlon, Director of Human Health and Nutrition, Safefood

Veritas (2020) examines aspects of modern culture that influence health and wellbeing in Ireland in 2020. The themes of mental wellbeing, addiction, diet and exercise and sustainability are considered by experts in the fields of psychiatry, psychology, addiction, nutrition, environmentalism, politics, sociology and public health.

The impact of the COVID 19 pandemic in human and economic terms will not be known for months to come. As it is unfolding, it is revealing human vulnerabilities and showcasing the importance of good leadership and well-functioning universal and social healthcare systems.

The lessons we collectively learn from this crisis will inform the next global crisis – the climate and biodiversity crisis which is already well underway, building its destructive potential globally.

The lessons we need to learn from the pandemic which have been explored in this recent publication, include the following:

1. Human history and natural history can no longer be separated – human health and the health of the planet go together.

Despite scientists warnings about the high risk of animal borne infectious diseases we continue to destroy natural habitats. The evidence of the destructive human impact on the natural environment from water to the soil to air and its negative impact on human health and wellbeing, is overwhelming. The neoliberal mind-set of 'growth at any cost' is a recipe for self-destruction.

Healthy societies and markets depend on the health of the natural environment. Green and inclusive growth is the only way to prevent the next global climate crisis, which could turn out to have even greater destructive impact than COVID 19.

2. Prevention is better than cure:

The pandemic is a strong reminder that ignoring science carries deep costs. Consistent warnings about the human impact on the climate, soil, water and biodiversity have been ignored. In an era of deliberate misinformation, management of the COVID 19 pandemic has helped to elevate trust in mainstream science and to reverse the trend of eroding trust in established institutions. This trend needs to be maintained if we are to successfully tackle emerging climate and biodiversity crises.

3. The private sector:

The neoliberal market model of continuous economic growth has been shown by COVID 19 to be a flawed model. This is equally so with emerging climate and biodiversity crises as well as health and wellbeing in modern culture. New ways of managing economic growth are required – models that include an imperative for ethics and sustainability to be considered and framed in governance for ongoing economic growth. Practically this means that decarbonisation and resource efficiency measures will be an essential element all off segments of the economy as well as the need for an equitable model of economic growth that benefits all sectors of society.

While coping with the COVID 19 pandemic, and emerging crises around climate and biodiversity, we have the opportunity to rediscover basic values of humanity and to lay the foundations for safer, healthier and cleaner life on the planet.

Animal content in commonly prescribed medicines

Author and affiliation: Dr Sarah Cullivan, Respiratory Department, Mater Misericordiae University Hospital, Dublin

Background

Numerous patients have specific dietary restrictions due to a combination of religious, ethical, allergy or lifestyle motives. While many prescribed medical products contain animal content, this is not always clear to both prescribing physicians and consuming patients (Rodger & Blacksha,2019).Therefore physicians may unintentionally prescribe these medications and goods to patients who typically exclude animal content from their diet and this can have implications for patient autonomy, trust and compliance (Sattar et al., 2004; Queensland Health, 2013). The aim of this study is to assess physician knowledge of animal content in prescribed medicines and goods.

Methods

All Non Consultant Hospital Doctors (NCHD) working in the Mater Hospital were included in the study population. They were contacted via social media (WhatsApp) on the 03.06.20 to request voluntary completion of an online survey which included nine questions regarding demographics, dietary and prescribing preferences and medications with animal content. A total of three days were allowed for survey completion and the survey was closed on the 05.06.20.

Results

A total of 22 NCHDs responded to the survey. 64% were male (n=14) and 91% were aged 25-35 years old (n=20). 73% (n=16) of prescribers had no specific personal dietary restrictions. NCHDs were given a list of 12 medications and medical products and asked to identify which items contained animal content (Table 1). Accuracy ranged from 14% to 91%, with a mean accuracy of 55%. Most doctors (91%, n=20) do not typically ask patients regarding dietary preferences during consultations. 59% (n=13) think that patients with specific dietary restrictions should be informed regarding animal content of medication and surgical materials and 73% (n=16) would chose an equivalent alternative without animal content if readily available.

Discussion

This survey has highlighted that many prescribing doctors have suboptimal knowledge regarding which medical products contain animal content, despite the fact that most physicians would chose an alternative without animal content if equivalent and readily available. This survey suggests that increased awareness of this issue is required, which could be facilitated through improved physician education and product labelling. These measures would respect patient autonomy and facilitate informed decision making.

Table 1 Displays NCHD accurate identification of animal content in medications and surgical material

| Correct identification of products with animal | N=22 | % |
|---|------|-----|
| content | | |
| Enoxaparin | 9 | 41% |
| Creon tablets | 17 | 72% |
| Premarin (Hormone Replacement Therapy) | 15 | 68% |
| Augmentin capsules | 5 | 23% |
| Galfer capsules | 8 | 36% |
| Gelofusine | 18 | 82% |
| Hydrocolloid dressings | 9 | 41% |
| Prevenar (pneumococcal vaccine) | 15 | 68% |
| Orthopaedic spacers | 3 | 14% |
| Correct identification of products without animal content | | |
| Paracetamol | 20 | 91% |
| Galfer syrup | 16 | 73% |
| Nylon sutures | 19 | 86% |

Mighty meaty feast – monitoring the salt content of processed meat in Ireland since 2003

Authors and affiliations: Dr Clare O'Donovan¹, K. McDonald¹, S. O'Mahony^{1,3}, C.M. Donovan¹, O.C. Lyons^{1,2}, W. Anderson¹, M.A.T. Flynn^{1,2} and N.A. Collins¹

¹Food Safety Authority of Ireland, ²Nutrition Innovation Centre for Food and Health, Ulster University, UK, ³University College Dublin, Ireland

Introduction

Irish national dietary surveys show that the majority (98%) of the population consume meat, the most commonly consumed of which are bacon and ham (Irish Universities Nutrition Alliance, 2011) Due to their high salt content, consuming a large amount of processed meat products in the diet will likely contribute to hypertension and increased cardiovascular disease (CVD) risk Aaron & Sanders, 2013). Since 2003, a voluntary salt reduction programme has been in place in Ireland; the purpose of which is to achieve gradual and sustained reductions in salt levels in products on the Irish market (Food Safety Authority of Ireland, 2019). The aims of this study are: (1). to investigate the trends in salt levels of processed meats on the market in Ireland since 2003 and (2). to determine whether the salt content of various products are gradually decreasing over time.

Method

Samples of processed meats were randomly collected at six time points (2004, 2006, 2009, 2012, 2015 and 2019). Branded and private label products were sampled from various supermarkets, butchers and convenience stores. Samples were categorised into groups including sausages, rashers, pudding, cooked ham and continental meats e.g. salami, pepperoni. Continental meats were sampled for the first time in 2019 to account for changes in the variety of processed meats available in Ireland. Samples were analysed for sodium and potassium content per 100g by the public analyst laboratory (PAL) in Galway using an accredited method based on atomic emission spectrophotometry. Sodium values were multiplied by 2.54 to determine the salt content (g) of products. Results were analysed using IBM SPSS (version 25). As data was not normally distributed, median values (minimum and maximum) were investigated across processed meat categories at six time-points. Differences between the time-points were assessed using Kruskal-Wallis and Mann-Whitney U tests.

Findings

A total of 701 products were sampled across the various time points including sausages (n=221), rashers (n=234), pudding (n=139), cooked ham (n=87) and continental meats (n=20). For 2019 samples, the salt concentrations of sausages, rashers, pudding and cooked ham were 1.99g (1.35-2.64), 2.49g (1.75-4.27), 1.94g (1.22-2.85) and 2.13g (1.37-2.74) per 100g food product respectively. Since 2004, a significant reduction in salt content of processed meat products was observed across all categories. The percentage of salt reduction from 2004 to 2019 ranged from 9% in sausages to 31% in pudding products. In 2019, the highest salt content was observed in continental meats (3.73g (3.05-4.75) per 100g food product).

Discussion/Practical or Social Implications

This study showed that the salt concentrations of traditional processed meats on the market in Ireland are gradually decreasing. However, the growth in popularity and availability of continental meats with higher salt levels is a new trend. Monitoring by the Food Safety Authority of Ireland (FSAI) should continue to allow verification of the salt content of processed meats and industry commitments to reduce salt content in these products. In terms of public health, consumers should limit their intake of processed meats to reduce the known risk of CVD.

Strengths and weaknesses of primary healthcare staff to design multidisciplinary or interdisciplinary strategies of physical activity on prescription in the Madrid Healthcare System

Authors and affiliations: Dr Sergio Calonge Pascual, S^{1,2}, Fuentes-Jiménez, F^{1,2}, Novella-María-Fernández, F¹ López-Diáz-Ufano, M.L^{3,4}, Villalvilla-Soria, D⁵, Casajús-Mallén, J. A^{2,6,7}, Arnal-Selfa, R⁸, Belmonte-Cortés, S⁹, González-Gross, M^{1,2,7}, on behalf of EXERNET Study Group

¹ ImFINE Research Group, Department of Health and Human Performance, Faculty of Physical Activity and Sport Sciences-INEF. Universidad Politécnica de Madrid, Spain. ² Red Española de Investigación en Ejercicio Físico y Salud en Poblaciones Especiales (EXERNET), Spain. ³ Centro de Salud Rosa Luxemburgo. San Sebastián de los Reyes, Spain. ⁴ Universidad Europea de Madrid, Spain. ⁵ Centro de Salud Alcalá de Guadaira, Spain. ⁶ GENUD Research Group. Department of Physiatrist and Nursing, Faculty of Health Sciences. University of Zaragoza, Zaragoza, Spain. ⁷ Biomedical Research Centre of Physiopathology of obesity and nutrition, CIBERobn, B12/03/30038. Carlos III Health Institute, Spain. ⁸ Dirección Asistencial Enfermería DA Norte. Gerencia Asistencial de Atención Primaria. Comunidad de Madrid, Spain. ⁹ Dirección General de Salud Pública. Consejería de Sanidad. Comunidad de Madrid, Spain.

Introduction

Physical inactivity and sedentary levels currently represent one of the major threats to public health. Physical activity on prescription (PAP) is an emerging preventive and treatment resource for non-communicable chronic diseases in healthcare settings. The aim of this study was to analyze the feasibility of implementing PAP at Primary Healthcare (PHC) centres in the Region of Madrid.

Method

A) a syllabus analysis of the European Credit Transfer System (ECTS) of all Spanish Universities of the Bachelor of Science in Nursing (2017-18), Sports Sciences, and Medicine (2016-17) were reviewed from online programme guides. B) Two, 2 hour focus groups with 5 randomly selected PHC nurses and GPs were performed. Two choice modelling Google-form questionnaires of 30 questions were designed from the results of the peer-content analysis of the verbatim transcribed focus groups. The questionnaires were e-mailed to all GPs and nurses in the Madrid PHC System (3850 GPs, 3547 nurses). Statistical analysis used Chi-squared tests, risk (OR) and Fisher analyses (SPSS, version 20). This study was approved by the Alcorcon Hospital Ethics Committee.

Findings

The total PAP-related ECTS in the Bachelor syllabus were for Sport Sciences (17.7%), Nursing (5.8%), and Medicine (3.6%). Both questionnaires were validated with Aiken's V coefficients of 0.89 (0.77- 1.00) for nurses and 0.84 (0.77- 0.95) for GPs . From a total of 319 physicians (76.50% females) and 285 nurses (88.40% females) only 14.7% of GPs versus 75.5% of nurses knew the current national PA guidelines. Showing that GPs have more than 98% of probability than nurses to collaborate with physicians, nurses, psychologists, physiotherapists, nutritionists, sports medicine physicians, sports scientists and school teachers on PAP (OR:1.98; p<0.001). There was a negative willingness between both PHC respondents to collaborate with wellness centres (82% GPs, 57% nurses; p<0.001), physiotherapy centres (45% GPs, 75% nurses; p<0.001) and private gyms (74% GPs, 76% nurses; p<0.001). In contrast, there was a positive willingness to collaborate with local sports centres (92% GPs, 63% nurses; p<0.001), schools (76% GPs, 67% nurses; p<0.05), Town Hall (84% GPs, 51% nurses; p<0.001) and Government (71% GPs, 69% nurses; p>0.05) resources.

Discussion/Practical or Social Implications

This novel study shows the necessity of specific teaching on PAP to PHC nurses and GPs to improve efficient PAP implementation in PHC settings. The less PAP knowledge, the more willing to collaborate with other health professionals. Furthermore, there are different self-perceptions among PHC staff in order to collaborate in a multi or inter disciplinary approach. Sport scientists could be integrated into this multidisciplinary team. Following a socio-ecologic approach, this organizational data could be the first step to design a future cost-effective policy strategy to improve patient health and healthcare system sustainability.

Students' attitudes and smoking behaviours following the implementation of tobacco-free campus in Athlone Institute of Technology: a cross-sectional study

Authors and affiliation: Clodagh Qualter, Lisa Hanlon, Healthy Campus Coordinator and Dr Patricia Heavey, Lecturer, Athlone Institute of Technology

Introduction

In recent years Ireland has demonstrated a substantial record in tobacco control by implementing policies focused on reducing smoking prevalence and tobacco consumption. Implementation of tobacco-free policies has the potential to reduce smoking behaviours and the Department of Health's Tobacco Free Ireland aims to "promote tobacco free campuses for all third-level institutions". Athlone Institute of Technology (AIT) was the first third level institute to implement a tobacco-free campus policy in Ireland. The policy was introduced in 2015 and prohibited smoking and the use of smokeless tobacco or unregulated nicotine products such as e-cigarettes on campus. The aim of this research study was to determine the attitudes and smoking behaviours of AIT students, following the implementation of the tobacco-free campus policy.

Methods

This was a cross-sectional study utilising a convenience sample. AIT students were recruited from different faculties across the Institute. A questionnaire (adapted from Chaaya et al., 2013) was administered to students which assessed compliance and attitudes towards the policy as well as smoking behaviours.

Results

A total of 153 students (Mean age 24±8 yr; 45% males, 53% females) completed the study. Smoking status indicated that 94 (61%) students never smoked, 12 (8%) were current smokers; 23 (15%) were occasional smokers and 24 (16%) were former smokers. Overall, there was good awareness of the policy with 31% largely aware and 58% aware to some extent. Knowledge about the policy came primarily from signage/physical indicators (51%) followed by communication from administration (18%). Ninety two percent of participants agreed to a large or some extent that the policy created a healthier campus environment. When asked about compliance, 80% of non-smokers agreed there was a large or some extent of compliance with the ban compared to 58% of smokers. Twelve participants identified as smokers and the mean age for starting smoking was 16±2.4 years. Ninety percent of smokers felt that the tobacco-free policy had not impacted their smoking behaviours. However, 33% of the current smokers were considering quitting cigarette smoking in the next 6 months. Students were also asked about vaping behaviours and 16% currently vaped; 7% daily; 9% either weekly or monthly. The mean age of commencing vaping was 20±5 years.

Conclusion

Overall, students were aware of and were positive towards the tobacco free campus. Although a large percentage of students never smoked it was interesting to observe the higher number of students who smoked occasionally or vaped. The average age of starting vaping would indicate that this behaviour commenced during the college years for most of the students. The policy in AIT needs to increase its focus on occasional smokers and those that vape as they could potentially become regular smokers. Although smokers felt that the tobacco free campus did not impact their smoking behaviours, the small sample size for smokers must be acknowledged and may not be representative. Additionally, the policy commenced in 2015 so these students would only have experience of a tobacco-free campus. It is recommended that this study is conducted in a larger sample size and extended to include staff from the Institute.

Tobacco cessation in cardiovascular disease management of acute coronary syndrome (ACS)

Author and affiliation: Dr Uzair Akbar Ali, Department of Medicine, University Hospital Waterford

Introduction

The World Health Organization (WHO) listed tobacco smoke as one of the biggest health threats as it kills more than 8 million people a year around the world. This mortality rate is a result of either direct tobacco use killing more than 7 million people or passive smoking killing more than 1.2 million people. Cardiovascular effects of tobacco use, or exposure are well known and evident in research studies conducted over the last few years. This review highlights the importance of tobacco cessation, pathophysiology of tobacco effects in cardiovascular problems and different techniques and their effectiveness with reference to tobacco cessation.

Methods

A review of existing literature on tobacco cessation interventions is used to identify the effectiveness of different techniques of tobacco cessation including both pharmacological and non-pharmacological interventions. Recent research studies including systematic reviews and meta-analysis are highlighted with their key points and results. These are illustrated with graphs and tables for better understanding. A comparison of the content of papers is also provided to point out weaknesses and the need for further research.

Findings

Varenicline was found to be an effective pharmacological agent for the purpose of smoking cessation as compared to nicotine replacement therapy and bupropion. Behavioural techniques are proven essential interventions in tobacco cessation and when combined with pharmacological methods further improve the outcome.

Discussion

Tobacco cessation should be an integral part of patient management with cardiovascular disease. Both pharmacological and behavioural interventions should be considered in the management of patients with acute coronary syndrome as the evidence has shown significant decrease in cardiovascular mortality when these interventions are used in combination. There is a critical need of more randomized clinical trials to find the efficacy of different tobacco cessation techniques.

Modes of transport to or from school and mental wellbeing of schoolchildren in Ireland

Authors and affiliation: Dr András Költő, Aoife Gavin and Professor Saoirse Nic Gabhainn, Health Promotion Research Centre, National University of Ireland Galway

Introduction

Active transport is a priority area within the Physical Activity Strategy for the WHO European Region 2016–2025. Active transport (walking and cycling) is associated with better physical health indicators. Cycling, as a form of moderate-to-vigorous physical activity, has multiple health benefits, including positive impact on mental and social well-being. It remains to be explored whether modes of transport to and from school are associated with indicators of mental health in Irish children.

Sample and method: We present analyses of 9,239 schoolchildren from Ireland (mean age: 13.53, SD = 1.92, percentage girls: 52.0%), drawn from the HBSC Ireland 2018 dataset. Scores on the WHO-5 Well-being Index, the Mental Health Inventory five-item version, and self-reported life satisfaction, happiness with self, body dissatisfaction, excellent self-rated health, and multiple health complaints were compared across transport methods. The dependent variables were compared by ANOVA or binary logistic regression controlled for family affluence and area of residence (urban/rural).

Results

The modes of transport to and from school were reported as: cycling (3.3%), walking (25.1%), car, motorcycle or moped (private vehicle) (46.3%) and public transport (25.3%). Mode of transport had a significant but weak association with all mental health outcomes. Those who reported walking or using public transport reported poorer mental well-being than those cycling or commuting by private vehicle. Cyclists had significantly better happiness with self and self-reported health than the other three groups. The pattern of the results generally remained robust after controlling for family affluence and area of residence.

Discussion

Children who cycled to/from school have similar mental well-being outcomes to those who used a private vehicle, and reported better happiness with self and self-rated health than all other groups. On most variables, these two groups had more favourable outcomes than those who walked or used public transport, but the effects were weak. Developing cycle-friendly and safe infrastructures, training children in safe cycling, and promoting families cycling might increase the number of children who use bicycles on the way to and from schools, and thus benefit from this form of physical activity.

Keywords: Active Transport; Child and adolescent mental well-being; Cycling

E-mail: andras.kolto@nuigalway.ie; aoife.gavin@nuigalway.ie; saoirse.nicgabhainn@nuigalway.ie

Twitter: @KoltoAndras, @aoifebgavin, @SaoirseNG

Parallel oral presentation abstracts

11.00

Chair: Dr Colette Kelly Moderator: Lhara Mullen

health Janis Morris Heart Found

Community heart projects: supporting disadvantaged communities access to and knowledge of sustainable food production and its link to cardiovascular health

Janis Morrissey, Head of Health Promotion, Information and Training, Irish Heart Foundation



Baby food made easy- increasing parental confidence to make home-made baby food

Dr Fiona Moloney, Senior Primary Care Dietitian, Health Service Executive (HSE), Dublin South, Kildare & West Wicklow Community Healthcare



Produce on the inside: personal experience of facilitating a gardening group within a mental health service in a prison **Gráinne Carley,** Occupational Therapy, Health Service Executive



Community at the heart of an eco-social approach: co-developing a toolkit for mapping ecosystem services, health and sustainability **Ann Marie Crosse,** PhD Candidate, Discipline of Health Promotion, NUI Galway, and Health Service Executive

12.15 Interactive Q & A sessions via Zoom Meetings



Community heart projects: supporting disadvantaged communities access to and knowledge of sustainable food production and its link to cardiovascular health

Presenting author and affiliation: Janis Morrissey, Head of Health Promotion, Information and Training, Irish Heart Foundation

Introduction/Purpose

Health outcomes in Ireland are distinctly unequal with people in deprived areas having the lowest life expectancy. Eighty percent of cardiovascular disease is preventable. Availability of and access to local, seasonal and affordable food is a core aspect of the ecological determinants of health model.

Community Heart Projects (CHPs) were a pilot initiative conducted through the Irish Heart Foundation (IHF) which aimed to positively influence health behaviours of low-income communities by promoting awareness of cardiovascular health and access to, and knowledge of, nutritious food and physical activity. Over a three-year period (2016-2019), IHF funded three Projects with a Traveller group and two family resource centres in rural areas. Each project was tailored to local needs and led locally to ensure ownership and foster long-term sustainability.

Method/Design/Approach

Each CHP had a designated leader working in partnership with the IHF CHP Co-ordinator to establish, develop and sustain their project. The CHPs varied with local need, but key elements included establishment of their own community garden, free IHF health checks and educational classes to build capacity and skills, particularly around growing food and use of the garden's produce.

Each CHP had a wide reach into their communities to access those that are most disadvantaged. CHP activities were designed to facilitate a diverse range of community members. Networking days between the three CHP's were held to facilitate inter-project experience sharing. Each project submitted a standardised report to IHF every 6 months detailing the specific activities undertaken and number of participants. Qualitative data were gathered through conducting focus groups in 2017 and in 2019. The facilitators followed a script and gathered information relating to the lived experience of project participants. The data were transcribed, and thematic analysis performed.

Findings

3,275 people participated in the three projects over three years. Over 20 activities catering for all age groups took place including horticulture training, cookery skills using community garden produce and workshops on nutrition, food labelling, budgeting, food waste and healthy food shopping.

535 people received a health check by an IHF nurse skilled in promoting positive lifestyle change through brief interventions. CHP members who participated in the range of activities reported greater awareness of cardiovascular health, improved eating habits and acquisition of new skills in horticulture and cookery.

Discussion/Practical or Social Implications

CHPs were a positive means of building capacity and understanding amongst disadvantaged communities of the value of local food production and its link to cardiovascular health. Challenges included sustaining engagement with target groups, turnover of staff and sourcing alternative funding.

Baby food made easy- increasing parental confidence to make home-made baby food

Presenting author and affiliation: Dr Fiona Moloney, Senior Primary Care Dietitian, Health Service Executive (HSE), Dublin South, Kildare & West Wicklow Community Healthcare

Other authors and their affiliations: Dr H. Ryan, E. Duggan & M. Aherne, HSE, Dublin South, Kildare & West Wicklow Community Healthcare

The authors would like to acknowledge and thank all Public Health Nursing teams in Dublin South West and Kildare & West Wicklow, and Food and Health Peer Leaders involved in this collaborative project.

Introduction

Nutrition from conception to 2 years is considered to be a critical period for the foundation for lifelong health. Current recommendations encourage home-prepared meals from an early age. However recent Irish data has shown that only 49% of meals in the first 6 weeks of complementary feeding were home-prepared (O'Donovan et al, 2015). Commercial baby foods are more expensive and lower in nutritional value than similar home-made foods. There is also concern regarding their impact on the environment due to increased manufacturing, packaging and food waste. By encouraging and supporting parents to cook homemade baby food for their infants we have the potential to make a positive contribution to future health and the environment.

Approach

A monthly 2-hour workshop imparting evidence-based information and enhancing skills in preparing home-made food runs free-of-charge for parents in eight sites across Dublin South West and Kildare. Workshops are facilitated by a Public Health Nurse from the HSE and a Food and Health Peer Leader from a local community development organisation who have been trained by HSE Primary Care Dietitians. Participants are asked to complete an anonymous evaluation form at the end of the workshop.

Findings

96% of attendees who attended a workshop between April 2018 and May 2019 completed an evaluation form (n=597). An 82% increase in confidence was self-reported by parents who attended using a Likert Scale for analysis. Participants were also invited to report anything they plan to do differently after attending the workshop. The most cited unprompted intended changes identified by parents were to, offer more homemade food, give greater variety of foods and progress through the stages introducing new foods more quickly.

Social Implications

Building parental feeding knowledge, confidence and skills in using home-made foods and in progressing with the introduction of varied complementary foods is important in improving infant feeding practices. Poor diets contribute to chronic disease which has implications for society as well as the economy. The environmental impact on global warming potential and toxicity due to packaging and manufacturing associated with commercial baby food as observed by Sieti et al (2019) urges additional caution regarding use. Of added concern is the increasing trend in use of pouches which are expensive, non-recyclable, lacking the authentic taste of home-made food which infants need to become accustomed to before moving onto family foods, promote poor feeding practices and are potentially damaging to young children's teeth. Baby Food Made Easy workshops provide local access to current infant feeding information, help develop practical skills among parents to support better choices at home.

Produce on the inside: personal experience of facilitating a gardening group within a mental health service in a prison

Presenting author and affiliation: Gráinne Carley, Occupational Therapy, Health Service Executive

Introduction

Personal account from an occupational therapy perspective of facilitating a gardening group within a mental health service in a prison.

Approach

- Personal desire and interest
- Encouraging the active participation of service users while outdoors
- Promoting awareness re use of small green spaces
- Produce used in the OT kitchen groups
- 'Bringing the outdoors in' to prisoners who could not access the outdoor space
- Understanding and communicating benefits
- Keeping it growing.

Findings

- On a personal level working within a prison engendered a feeling of being limited and enclosed, hence spending time outdoors led to a more positive interaction with the daily environment. Personal competency re ecology created positive interactions.
- Creation of a healthy and quiet space contrasted with the generally loud and largely unhealthy environment. Clear guidelines re risks facilitated the ongoing development of the group.
- Skills sharing was encouraged among service users and roles and responsibilities shared.
- Noticing of an enclosed eco system the joy of spotting a ladybird or butterfly or coming across a lemon which had become ripe
- Choices made re planting were made with the intention that growth was rapid. Using the produce in cooking and
 creating links to healthy eating was a novel way to show the complete cycle from farm to fork and helping create a
 sense of community
- Planting the seeds and making sleep hygiene pouches allowed prisoners to participate despite being unable to access this outdoor space
- Service Users reported benefits including feeling a sense of accomplishment; productive use of their hands; positive mental health gains. Positive benefits for staff involved.
- Interaction with more prison-employed staff due to location of outdoor garden space & allowing them to view prisoners taking on a productive and positive role.

Discussion/Practical or Social Implications

- Providing access to green spaces within enclosed environments is important, and occupational therapists can play
 a key role in developing this.
- Sensory deprivation levels are high in prison populations, activities promote stimulation of the senses
- Sharing the spoils became a manner to involve those who didn't partake in the gardening group and to capture their interest for future participation also
- Relationship building becomes easier to foster naturally
- Scope for more ,e.g. farm to fork discussions; linking in with community projects on release.

In environments where access to space, materials and tools can be limited and where risk taking is challenging to manoeuvre, green projects can be implemented with careful planning and relationship building, and on the whole lead to positive outcomes in the short and medium term for both staff and service users.

Promoting health and wellbeing: creating a more equitable and sustainable environment

Community at the heart of an eco-social approach: co-developing a toolkit for mapping ecosystem services, health and sustainability

Presenting author and affiliation: Ann Marie Crosse, PhD Candidate, Discipline of Health Promotion, NUI Galway, and Health Service Executive

New understandings of the contributions of healthy ecosystems and ecosystem services to planetary and human health suggests the need to integrate ecological determinants of health into public planning and policies. A review of the literature in this area indicates a focus on environmental and economic values of regulating, provisioning and cultural ecosystem services. Research on health and wellbeing is predominantly linked to cultural services, for example, tourism, green and blue exercise and sense of place.

At a policy level, the connection between ecosystems, health and sustainable development is recognised, for example, through the Convention on Biological Diversity, the Shanghai Convention on Health Promotion and the 2030 Agenda for Sustainable Development. Yet significant gaps in implementation remain, meaning that co-benefits of an eco-social approach are yet to be realised.

This paper highlights the need and urgency to strengthen the interface between ecological and social determinants of health at all levels of decision-making. It identifies the need for a shared language and understanding in this important area, one that acknowledges the importance of indigenous and community knowledge alongside policy and science.

This research study aims to co-produce a community toolkit to map ecosystem services, health and sustainability with two communities in the Republic Ireland. Within this research, the community itself is seen as a critical stakeholder, one who holds community knowledge and has a sense of place within the research landscape. The community toolkit aims to provide processes and tools to optimise eco-social connections at local planning and policy level. In this new epoch of the Anthropocene, the promotion of population health cannot be perceived in isolation from healthy ecosystems. Hence, communities play a pivotal role in co-designing a healthy and sustainable future.

Oral presentation abstracts

Theme 2: Adaptation in a changing environment for health risks

11.00

Chair: Professor Saoirse Nic Gabhainn Moderator: Dr Catherine-Anne Field



PIER pressure: what lurks beneath the surface? Dr Liam Burke & Dr Sinead Duane, Bacteriology, NUI Galway





Green healthcare – waste, water and benchmarking Eileen O'Leary, Lecturer, Clean Technology Centre, Cork Institute of Technology



Does making the invisible radioactive gas radon "visible", through the use of digital monitors, increase remediation rates among householders? **Stephanie Long,** Senior Scientist, Environmental Protection Agency



Child and Adolescent measures for planetary health **Divya Ravikumar,** Research Assistant, Health Promotion Research Centre, NUI Galway



Food, balancing population and environmental health **Dr Martin O'Donnell**, NUI Galway

12.15 Interactive Q & A sessions via Zoom Meetings

Green healthcare – waste, water and benchmarking

Presenting author and affiliation: Eileen O'Leary, Lecturer, Clean Technology Centre, Cork Institute of Technology

A summary of the ongoing work of the Green Healthcare programme, which is funded by the National Health Sustainability Office of the HSE. The presentation summarises the results of the programme in relation to food waste, clinical risk waste, recycling, and water conservation, with a particular focus on benchmarking.

The programme is running since late 2009. The programme looks at potential environmental improvements and cost savings for hospitals, both acute and community. Various guidance and case studies have been produced which are available on <u>www.greenhealthcare.ie</u> and <u>www.hse.ie/sustainability.ie</u>.



PIER pressure: what lurks beneath the surface?

Presenting authors and affiliations: Dr Liam Burke & Dr Sinead Duane, Bacteriology, NUI Galway

Other authors and their affiliations: Farrell, M L^{1,2}, Duane, S^{1,2,3}, Cormican, M^{1,2,4}, Domegan, C^{2,3}, O'Connor, L^{1,2}, Britton, E^{2,3}, Mc Namara, A^{2,5}, Kiernan, R^{2,5}, Harkin, K^{2,5}, O'Donovan, D⁶, Leonard, AFC⁷, Gaze, W⁷, Burke, LP^{1,2}, Morris, D^{1,2}

¹ Antimicrobial Resistance and Microbial Ecology Group, School of Medicine, NUI Galway, Ireland

² Centre for One Health, Ryan Institute, NUI Galway, Ireland. ³ Whitaker Institute, NUI Galway, Ireland

⁴ Health Service Executive ⁵ Department of Public Health, Health Service Executive (HSE) West, Galway, Ireland

⁶ Centre for Public Health, School of Medicine, Dentistry and Biomedical Sciences, Queen's University, Belfast

⁷ European Centre for Environment and Human Health, University of Exeter Medical School, Truro, UK

Introduction/Purpose

Antimicrobial resistance (AMR) occurs when antimicrobial drugs are no longer effective in treating infections and is one of the greatest threats to human health. The spread of antimicrobial resistant bacteria (ARB) within the aquatic environment is a relatively underexplored issue. Recent work by Mahon *et al.*, (2017) revealed consistent contamination of naturally occurring recreational waters with ARB. Recreational use of bathing waters is popular globally and is important for health and wellbeing. However, exposure to contaminated waters could be a risk factor for gut colonisation with ARB, which may represent a pathway for their transmission to vulnerable humans.

Method/Design/Approach

PIER – Public health Impact of Exposure to antibiotic Resistance in recreational waters- is an EPA-funded project with two parts. The first involves a cross sectional point prevalence and longitudinal cohort study which will examine the incidence of colonisation with these organisms and their persistence in participants' guts over a two-year period. PIER will compare the carriage rates of ARB in regular users of recreational water versus non-users. Human faecal samples will be screened for Extended Spectrum Beta-Lacatamase (ESBL) Producing *Enterobacterales* and Carbapenemase-producing *Enterobacterales* (CPE) using selective chromogenic agars. Identification of isolates and antibiotic susceptibility testing (AST) will be performed in accordance with standard clinical laboratory methods. Whole Genome Sequencing (WGS) results will be compared with data collected as part of the EPA-funded AREST project (Antimicrobial RESistance in the environmenT) to assess if recreational water use can be attributed as a pathway for ARB transmission. Systems thinking is key to dealing with the fundamental interconnectedness of complex, local-to-global economic, social and environmental issues. The second part of PIER adopts a mixed method, systems-based methodology to examine the natural recreational water ecosystem. It aims to map the interrelated barriers and facilitators which influence stakeholders' decisions to engage with natural recreational waters on the west coast of Ireland. A systematic review and stakeholder analysis is underway, with a survey of all stakeholders planned. Ethical approval for PIER has been granted.

Findings

Part 1 will identify if people who regularly use recreational water are more likely to be colonised with ARB than those who don't and will determine the relative risk of colonisation from exposure to ARB in natural recreational water. It will also examine how long ARB persist in the gut of water users versus controls. Part 2 will result in a "natural recreational water" ecosystem stakeholder dynamic map capturing the perceived interaction, interconnections and interdependencies relevant to the appropriate use of the beach environment across the west of Ireland.

Discussion/Practical or Social Implications

PIER will explore the public health implications from exposure to AMR in recreational waters. PIER will inform development of environmental policies for the protection of public health and the preservation of recreational waters.

Does making the invisible radioactive gas radon "visible", through the use of digital monitors, increase remediation rates among householders?

Presenting author and affiliation: Stephanie Long, Senior Scientist, Environmental Protection Agency Other authors and their affiliations: Leo McKittrick¹, Hazel Percival², Alan Butler², Lorraine Marrey² ¹ Environmental Protection Agency, ² Wexford County Council

Introduction/Purpose

Radon gas is a radioactive, carcinogenic gas linked to up to 300 cases of lung cancer in Ireland each year. It is the biggest cause of lung cancer after smoking, and the main cause of lung cancer in non-smokers. It is simple to test radon levels in the home and, where radon is above the acceptable level, it is easy to reduce levels and so reduce the radiation dose received by those living in the house. However, it is difficult to persuade householders to test for radon – awareness campaigns typically result in a 22% response when a free test is offered. Once householders test above the reference level, the remediation rate is also low, with typically 20% of those that know they are exposed to elevated levels of radon taking action. Anecdotally, householders that view their results on a digital monitor (instead of the report received following a standard test) are much more likely to take action to remediate to reduce radon in their homes.

Method/Design/Approach

It is estimated that there are at least 6,000 householders in Ireland knowingly living with elevated levels of radon that have not taken action to reduce their exposure to this gas. The purpose of this study was to test whether making digital monitors available to these householders would "nudge" them to take action to reduce their exposure. In partnership with Wexford County Council, the Environmental Protection Agency (EPA) invited members of the public living in homes with elevated radon levels to an evening talk on radon in Bunclody library. Bunclody and the surrounding area is known to be at high risk from radon. Nineteen digital monitors were offered to those that attended to borrow using their library card to confirm for themselves that the radon in their homes remained high.

Findings

The digital monitors were checked out by library members almost forty times in the two-month period from November 2019 to January 2020. A local radon remediator reported that nine of these householders contracted him to carry out work to reduce radon in their homes. The figure of nine householders taking action can be compared to a total of three householders taking action in a previous study that offered a free standard test and 50 % funding towards remedial costs (no funding was offered in this study).

Discussion/Practical or Social Implications

Although this is a small study, it indicates that householders that use digital monitors to confirm the results of a standard test are significantly more likely to act to reduce their exposure to radon. The next steps will be to meet householders to learn more about their experience of and motivation to test and to then apply these learnings to the next phase of this project in a larger library.

Child and Adolescent measures for planetary health

Presenting author and affiliation: Divya Ravikumar, Research Assistant, Health Promotion Research Centre, NUI Galway

Other authors and their affiliations: Tansy Ryan¹, Dr Colette Kelly², Professor Saoirse Nic Gabhainn². ¹Galway-Mayo Institute of Technology, ²Health Promotion Research Centre, NUI Galway

Introduction/Purpose

The purpose of this literature search was to identify research that had been conducted with young people on planetary health and environmental sustainability. The purpose was to inform the design of questions for inclusion in the Health Behaviours in School-aged Children (HBSC) survey. The rationale for this research came from participative workshops with young people. This project is an international collaboration with Portugal, Armenia and other HBSC countries.

Method/Design/Approach

Information was sourced via Embase, EBSCOHost, SCOPUS and Web of Science. Search terms were split into three concepts to include terms relating to the environment, young people and knowledge or attitudes. Results were limited to those published in the last ten years and data from children aged 10-19 years, in line with the World Health Organization's definition of 'adolescent'.

Findings

The search yielded 28 full text documents that met the inclusion criteria; 12 originated from European countries, 8 from the United States, 2 originated from Australia, 1 from Brazil and a further 5 documents from Asian countries. The topics covered included: environmental knowledge, prioritisation, attitudes and actions; climate change awareness; exposure to media information on global warming and climate change; education on sustainability development in secondary schools; the environment and the economy; managing electrical and electronic waste; environmental preservation and utilisation; the impact of environment-specific education on environmental attitudes (e.g., in a woodland area or botanical garden); food waste management; and morality regarding environmental issues. The largest topic area was awareness and attitudes related to climate change, which covered areas that are relevant in the context of current planetary health, such as interest in climate change; discussions with family and friends; making sense of climate change; and understanding the effects of climate change.

Discussion/Practical or Social Implications

The results have provided useful information on questions to address environmental issues with adolescents. The articles cover a large cross-section of topics related to the environment and the environmental implications of climate change. Questions on awareness and attitudes to climate change are most utilisable content for the HBSC survey.

The incorporation of questions related to planetary health into the HBSC 2021/22 survey will aid our understanding of the position of adolescents in relation to climate change. This could benefit the development of more youth-specific strategies to tackle the issues of climate change and sustainability. Questions on planetary health will be piloted internationally for the HBSC survey in 2021/2.

Food, balancing population and environmental health

Presenting author and affiliation: Dr Martin O'Donnell, NUI Galway

(abstract not available)

Oral presentation abstracts

Theme 3: Healthy cities and green and blue infrastructure

11.00

Chair: Sarah McCormack Moderator: Dr András Kolto



Healthy Places, Healthy Children Anne McCusker, Programme Manager, Belfast Healthy Cities



'Healthy Placemaking' in the Regional Spatial and Economic Strategy for the Eastern and Midland Region, Ireland: the role of green and blue infrastructure **Dr Owen Douglas,** EU Project Officer, Eastern and Midland Regional Assembly, Ireland



Connecting health protection and health gain into the planning and development process Andrew Sulley, Environmental Health Officer, Health Service Executive



Green spaces for health in Cork City Maria Young, Co-ordinator Green Spaces for Health



GOGREEN ROUTES: a study programme protocol of nature connectedness promotion on health, wellbeing and sustainability **Cassandra Murphy,** Research Associate, GOGREEN ROUTES H2020 project, Health Research Institute, University of Limerick

12.15 Interactive Q & A sessions via Zoom Meetings

Healthy Places, Healthy Children

Presenting author and affiliation: Anne McCusker, Programme Manager, Belfast Healthy Cities

Introduction/Purpose

Belfast, as a Healthy City, developed the concept of healthy urban environments during Phase III (1998-2002) of the WHO European Healthy Cities Network. This programme of work led to the identification of a gap in policy in relation to child friendly places providing an opportunity to explore the practical application of the healthy urban environments concept. A main aim of the programme was to provide children with a platform for sharing their views as a major but often less heard population group, whose healthy development and future engagement in society could be significantly strengthened through a greater sense of ownership, both in their communities and in decision making.

Method/Design/Approach

To progress the child friendly places programme, Taking Action for Child Friendly Places, an inter-sectoral action plan based on extensive engagement with children across Belfast, was developed and was the first time such a focus has been put on children and the built environment in Belfast. About 7000 children and families were directly engaged with using innovative methods to identify priorities and the action plan set out partners' responsibilities under the following areas: Engaging and Empowering Children; Creating Healthier Places and Supportive Environments; and, Tools for Child Centred Spatial Planning and Design. In response to feedback from teachers, this model was developed into a dynamic teaching resource, in partnership with the Education Authority, the Public Health Agency and Northern Ireland Housing Executive. Healthy Places, Healthy Children is a Key Stage 2 teaching resource that supports delivery of the Northern Ireland Curriculum on cross curricular skills, as well as in relation to the World Around Us curriculum – a thematic area of learning. This Healthy Places, Healthy Children and presented to decision makers, being brought to life. Belfast Healthy Cities has recently launched an online version of the resource which allows the resource to be delivered on a regional and wider basis in the future.

Findings

The resource comprises 7 Units, which support modular delivery over a flexible time period. The Units introduce children to a project planning approach and enable them to work their way through a planning process from framing the issue and gathering evidence to identifying priorities and developing a delivery plan. The Units also include opportunities to explore different perspectives, compare subjective and objective assessments, and practise reaching consensus. Each Unit booklet sets out the learning intentions, contains teachers notes and learning exercises, and is supported by a range of guidance and practical resources. A Delivering Change booklet, telling the stories of 6 schools who have successfully completed the programme is also available for peer learning. The teaching resource has been delivered across the WHO European Healthy Cities Network.

Discussion/Practical or Social Implications

The Healthy Places, Healthy Children resource enables children to engage with and inform local decision makers. The resource uses teaching methods which embrace the principles of co-creation so children are empowered and have ownership of outcomes and also provides a platform for children to contribute towards decisions that affect them in places where they live, go to school and play. The focus and promotion of Belfast Healthy Cities child friendly cities programme has influenced policy direction and has been identified as one of the key areas of work for the Commissioner of Resilience in Belfast and the community planning strategic document Belfast Agenda.

'Healthy Placemaking' in the Regional Spatial and Economic Strategy for the Eastern and Midland Region, Ireland: the role of green and blue infrastructure

Presenting author and affiliation: Dr Owen Douglas, EU Project Officer, Eastern and Midland Regional Assembly, Ireland

Introduction

The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region is the statutory strategic plan and investment framework for the region made by the Eastern and Midland Regional Assembly (EMRA). Within the current RSES (2019-2031), *healthy placemaking*; 'to promote people's quality of life through the creation of healthy and attractive places to live, work, visit and study in', has been established as one of its key underlying principles, along with *climate action* and *economic opportunity*. Cross-cutting these principles, the RSES recognises the important role of green and blue spaces in contributing to population health and wellbeing.

Methodology

The RSES - adopted in June 2019 - builds on the National Planning Framework (NPF) to determine how best to achieve its goals at a regional scale. For the RSES, significant and varied evidence gathering and public consultation was undertaken to articulate and build on the NPF at the regional level. One of the key goals of the NPF is the creation of 'healthy communities' by supporting the objectives of public health policy, including *Healthy Ireland* and the *National Physical Activity Plan* by integrating such policies with planning policy.

Findings

In line with the NPF, the RSES recognises that health issues including obesity, heart problems, stress and mental health are intertwined with the places and environments that people live and work in. Indeed, the need to define clear actions for the improvement of population health and wellbeing were identified early in its development. More specifically, the need to plan for healthier and more attractive places; healthier behaviours; improved public realm, and; natural and green spaces in urban areas were identified as priority actions. This focus, in part, emerged from EMRA's involvement in an EPA funded project titled *Green and Blue Spaces: A Health-Led Approach (GBI Health)*. Evidence suggests that access to green spaces (parks, forests, etc.) and blues spaces (rivers, coasts, etc.) has health benefits. These spaces can be called green and blue infrastructure (GBI). *GBI Health* examined and confirmed positive health outcomes with the presence of GBI in an Irish context. The RSES draws on this evidence to emphasise and promote the placemaking function of GBI.

Discussion

While the health and wellbeing function of GBI has been well established in the scientific literature, convincing key stakeholders of its value remains a challenge. The RSES is implemented in policy by way of review by local authorities of all development plans and Local Economic and Community Plans (LECPs), to ensure their consistency with national and regional policy. Many such plans take a narrow view of GBI, limiting it to biodiversity protection and other environmental functions, while overlooking its role in *healthy placemaking*. As a regional policy, the RSES has clearly articulated the role of GBI in creating healthy and sustainable communities. Through partnership on an INTERREG Europe project titled *Promoting the Governance of Regional Ecosystem Services (PROGRESS)* an Action Plan is being developed to facilitate improved implementation of GBI for *healthy placemaking, climate action* and *economic opportunity* across the region.

Connecting health protection and health gain into the planning and development process

Presenting author and affiliation: Andrew Sulley, Environmental Health Officer, Health Service Executive

One of the significant challenges faced in the area of creating liveable healthy spaces and place is disconnect between the theoretical models and the development and planning decisions being made.

In recognition of this, the Environmental Health Service (EHS) of the Health Service Executive has set up a specialist National Operational Unit to make submissions in the planning and development process with the aim of advising planning authorities on how public health should be protected and how health gain and wellbeing can be maximised when making decisions on spatial planning and the built environment. Currently the EHS makes around 250 submissions a year.

Planning Authorities are required to make a Strategic Development Plan for their area every 6 years which then becomes their principle strategic planning policy document. This Plan will govern development of land and the built environment over a 6 year cycle. The HSE is a Statutory Consultee in the process of making this plan and the planning authorities must consult with them and consider any submissions made prior to finalising their plan.

This presentation outlines where submissions on the protection of health and the maximisation of health gain and wellbeing can be made in the strategic planning process, the criteria around a submission and how a submission can influence the final decision making.

The presentation then considers how the EHS formulates a submission using existing environmental and health data and how current health strategies form the evidence base for the content of submissions made.

The final part of the presentation is considering a number of examples of where a submission by the EHS has directly affected the decision making of planning authorities and how the strength of submissions might be improved.

Green spaces for health in Cork City

Presenting author and affiliation: Maria Young, Co-ordinator Green Spaces for Health

Other author and their affiliation: Denise Cahill Coordinator Cork Healthy City

Introduction

The need to connect meaningfully with the natural environment is integral to human physical and mental wellbeing. Green Spaces for Health supports the interconnectedness of several factors that collectively contribute to the creation of a healthy city; clean air, safe extensive opportunities to travel on foot or on bike, a place where nature is intrinsic to the life and structure of the city. Green Spaces for Health promotes physical and mental health activity and wellbeing in greening initiatives at community, institutional and individual levels.

Method

In our city where for historic reasons there is little opportunity for the creation of parks, we have to develop our understanding of green spaces to mean a city with an abundance of healthy native trees, a street infrastructure that supports opportunities for growing plants, places for citizens to walk, cycle and sit, and spaces for children to play. We explore the potential to create green walls and rooftops, and design/implement urban food growing opportunities. Green Spaces for Health have conducted a tree audit of part of the city to highlight the types of trees that are growing to emphasise their contribution to health by cleaning the air and providing us with the benefits of the natural world. This audit has highlighted opportunities where more trees can be planted. We have assisted in the successful installation of two bee hives on a third level institutions' rooftop, gaining positive traction in the community who are encouraged to interact with the maintenance of the hives, grow pollinator supporting flowers and further their education of bees. The institution now runs a bee keeping course. We have been granted stewardship of a local park (cemetery) and run weekly gardening sessions. With this community we planted hedgerows, flowers and trees getting people outdoors, involved in positive physical activities. We are embarking on a project to grow food in a public setting, this opens opportunities to explore healthy eating and sustainability. We are organising tree/flower trails to get people out walking. We hold regular events in the park and have witnessed it transform from a place of neglect to a place where people go to walk and play in.

Findings

There is a need to encourage people to get to know the trees in their area. Some of the specimen trees are inaccessible with no opportunity to comfortably admire them. We discovered an interest and desire to maintain the cities trees and to plant more. The cultural significance of trees in the folklore of the area was another discovery. The idea to establish tree trails was broadly welcomed. People felt their lives were enhanced by their proximity to the hives in the bee project, with the realisation that nature does not have to reside in a rural setting, the community followed with interest the development of the bees in their area. It generated hope and was largely seen as a very positive project with many spin offs for both the college and the locality. We host regular events in the park and have witnessed it transform from a place of neglect to a place of learning and relaxation where people go to walk, play and garden in. The work in the garden extends across all ages.

Discussion

The work has involved partners as diverse as UCC (School of Bees), (School of Psychology), Local Community Gardaí, Colleges and Institutions (St John's College of Further Education and the Nano Nagle Centre) and many more. The opportunities presented by Green Spaces for Health for both community and organisations to work together has proven very successful and has led to a growing awareness of the tangible benefits of nature to our health and well being in an urban setting.

GOGREEN ROUTES: a study programme protocol of nature connectedness promotion on health, wellbeing and sustainability

Presenting author and affiliation: Cassandra Murphy, Research Associate, GOGREEN ROUTES H2020 project, Health Research Institute, University of Limerick

Other authors and their affiliations: Dr Tadhg MacIntyre¹, Associate Professor Alan Donnelly¹, Dr Norma Bargary¹, Dr Eibhlis O'Connor¹, Associate Professor Stephen Kinsella¹, Dr Elaine Gallagher¹, Dr Conor Little¹

¹ University of Limerick.

Introduction

The objective of GOGREEN ROUTES (2020-2024) is to position European cities as world ambassadors of urban sustainability by implementing nature-based solutions (NBS) and advancing our understanding of urban re-naturing on human and environmental health. In addition to exploring the impact of NBS (interconnected green corridors in public spaces) on ecosystem restoration and resilience, and climate change adaptation and mitigation, we investigate the impact of nature-based interventions on multidimensional health-termed 360-Health. Nature-based interventions are programmes, activities or strategies that aim to engage people in nature-based experiences with the specific goal of achieving improved health and wellbeing (Gritzka et al., 2020). Central to this concept is the idea of nature connectedness which refers to an individual's subjective sense of their relationship with the natural world. A recent meta-analytic review suggested that nature connectedness is associated with greater happiness and moreover that it may mediate the positive effects of human-nature interactions (Capaldi et al., 2014). Recent findings from case studies and diverse methodologies support this viewpoint (Donnelly & MacIntyre, 2019) despite challenges in the measurement of the construct of nature connectedness. It is vital to understand the role of nature connectedness in promoting nature contact or green exercise (i.e. green exercise refers to physical activity in natural settings) as human-nature interactions are associated not just with increases in individual wellbeing but with pro-social behaviour, empathy and social cohesion. This may lead to reciprocal benefits in terms of environmental concern and pro-environmental behaviour.

Approach

GOGREEN ROUTES pioneer a unique approach by validating a novel measure of urban nature connectedness, investigating the impact of a range of diverse co-created programmes on cultivating nature connectedness across intergenerational cohorts in six European cities and furthermore, developing an evidence informed model to elucidate our understanding of the links between nature connectedness, 360 health and community health, and planetary health.

Discussion

It is challenging but potentially rewarding to address what are seemingly simple concepts such as nature connectedness and engage in conceptual analysis. The fruits that can be borne from such investigations given the reduced access to authentic nature in urban settings include a stream of research into technological or digital nature (defined as "technologies that in various ways mediate, augment, or simulate the natural world). The implications of the investigations into nature connectedness are significant in helping us develop interventions to promote sustainable approaches to enhance urban living, interventions that are low-risk, low-cost and with a range of benefits and co-benefits.

Theme 4: Health and physical activity and active transport

11.00

Chair: Dr Patricia Heavey Moderator: Dr Verna McKenna



GOGREEN ROUTES: a study programme protocol of sustainable physical activity promotion **Dr Tadba E MacInture** Lecturer Lead GOGREEN ROUTES H2020 project Health

Dr Tadhg E. MacIntyre, Lecturer, Lead GOGREEN ROUTES H2020 project, Health Research Institute, University of Limerick



Promoting physical inactivity and car dependence: the case of Waterford city's suburbs **Dr Elaine Mullan,** Lecturer, Waterford Institute of Technology

6

Context and role of travel behavioural change in supporting healthier and more resilient futures **Dr Lorraine D'Arcy,** Senior Lecturer **& Sinead Flavin**, Assistant Lecturer, Technological University Dublin





Commoovity – moving the community Brendan Meskell, Colm Walsh, James Walsh, Kathleen Jacobi, Matthew McGuinness. MSc in Transport and Mobility students, Technological University Dublin

Promoting cycling for transport: home truths and fallacies **Dr Elaine Mullan,** Lecturer, Waterford Institute of Technology

12.15 Interactive Q & A sessions via Zoom Meetings

GOGREEN ROUTES: a study programme protocol of sustainable physical activity promotion

Presenting author and affiliation: Dr Tadhg E. MacIntyre, Lecturer, Lead GOGREEN ROUTES H2020 project, Health Research Institute, University of Limerick

Other authors and their affiliations: Alan Donnelly¹, Norma Bargary¹, Eibhlis O'Connor¹, Stephen Kinsella¹, Elaine Gallagher¹, Conor Little¹ ¹University of Limerick

Introduction

The objective of GOGREEN ROUTES is to position European cities as world ambassadors of urban sustainability by implementing nature-based solutions (NBS) and advancing our understanding of urban re-naturing on human and environmental health. In addition to exploring the impact of NBS (interconnected green corridors in public spaces) on ecosystem restoration and resilience, and climate change adaptation and mitigation, we investigate the impact of nature-based interventions on multidimensional health-termed 360-Health. Nature-based interventions (NBI) are programmes, activities or strategies that aim to engage people in nature–based experiences with the specific goal of achieving improved health and wellbeing (Gritzka et al., 2020). Previous research using the ecosystem services framework has focused upon narrow definitions of health (e.g. stress reduction and attention restoration) whereas there is now ample evidence of broader benefits from human nature interactions including resilience and pro-social behaviour (Donnelly & MacIntyre, 2019). It is critical that we elucidate the impact of NBS and NBI given the back drop of increasing urbanisation (beyond the EU rate of 75%, 2019), UN SDG target to provide universal access to safe, inclusive and accessible, green and public spaces (11.7) and the need to promote sustainable physical activity.

Approach

GOGREEN ROUTES transdisciplinary consortium will pioneer a unique approach augmenting NBS, urban design with NBI focused on promoting sustainable physical activity. This comprises (a) green exercise programmes for local schools and workers in local businesses (b) active travel for students and those working in urban areas and (c) social play in urban settings and (d) the use of restorative natural green spaces for active recreation. Green exercise refers to physical activity in natural settings. An event-based approach will be employed across the six target cities of the programme which includes Limerick city. A controlled trial will be conducted in addition to an analysis of intervention programmes using mixed methods approaches (e.g. walking interview methodology), Big Data (e.g. google mobility patterns) and localised data from citizens observatory. Data on environmental quality and predicted increases in tree canopy coverage, thermal comfort and biodiversity and reductions in co-hazards of localised air and noise pollution will be evaluated.

Discussion

The implications are complex and include potential adverse effects from additional green infrastructure (e.g. pollen allergens). Both self-reported and objective reporting of physical activity are predicted to increase substantially and uniquely we measure the impact on aspects of health including individual health (BMI, well-being, reduced stress, sleep quality), community health (social cohesion) and planetary health. Increases in active travel are predicted at different levels for our six target cities (e.g. up to 20% in Limerick) based on baseline findings. Green exercise and changes in urban mobility modes (e.g. from car to bike) will be analysed. Increasing the proportion of citizens who have access to green space, for example, at least 2 hectares within 300metres of their residence are among the structural goals.

Promoting physical inactivity and car dependence: the case of Waterford city's suburbs

Presenting author and affiliation: Dr Elaine Mullan, Lecturer, Waterford Institute of Technology

Introduction

To paraphrase the WHO Global Action Plan on Physical Activity (2018), Irish citizens do not have access to safe places and spaces in their suburban communities in which to engage in regular physical activity (PA). Less than half of all Irish adults meet the recommended PA levels (46%: HI, 2018) and a meagre 17% of primary school and 10% of secondary school children do so (CSPPA, 2018). In addition, 74% of all journeys nationally are made by car (CSO, 2016), of which 26% are less than 2 km, a distance easily walked, and 57% are less than 8 km, a distance easily cycled; only 2% report cycling to school or work. None of this is surprising as the suburban environment, where the majority live, actively discourages PA for recreation or transport. We have, in fact, systematically designed physical activity out of our suburban areas because mobility, social connectivity and housing have not been planned together.

Approach

The DTTAS Design Manual for Urban Roads and Streets (DMURS, 2013 & 2019) is founded on four key principles: connected streets, multi-functional streets, pedestrian focus and multi-disciplinary approach. It acknowledged that the design of roads and streets in the past has prevented sustainable mobility, and, by inference, PA. However, despite DMURS applying equally to the suburbs, the guidance has not been applied here and car dependence continues to be built-in to the design of new residential areas, as the norm. This is euphemistically known as 'carchitecture' and takes the following form: 1. large, wide, open 'distributor roads' providing 'free flow' conditions for vehicles that segregate and separate residential areas; 2. single-entrance, cul-de-sac design housing estates that lack connectivity, permeability, and proximity to adjoining estates or any services at all, including public transport.

Findings

Such designs effectively prevent walking and cycling because destinations (friends' houses, schools, shops, workplaces) are too far away, and the surrounding roads are full of traffic. So all residents are car dependent: they are left with no choice but to drive everywhere. This often prevents children from playing outdoors – because the street space is blocked with parked cars or dangerous because of moving cars. Such designs also lead to social isolation, as those without access to a private car (e.g., migrants, low SEG's, young people) can struggle to access recreation facilities, employment and education. Young people in particular, can become entirely dependent on their parents to chauffer them everywhere.

Social implications

We have prioritised cars over people in Irish suburbs, to the detriment of the physical and social health of the people that live there. We cannot expect people to be physically active, whether for transport, or recreation, when inactivity is so strongly reinforced by the design of their environment. We are currently in the midst of a housing crisis, a gradually unfolding climate catastrophe and twin physical inactivity and obesity epidemics. It is essential, therefore, that we don't try and fix the first problem by building more of what exacerbates the other ones.

Context and role of travel behavioural change in supporting healthier and more resilient futures

Presenting authors and affiliation: Dr Lorraine D'Arcy, Senior Lecturer & Sinead Flavin, Assistant Lecturer, Technological University Dublin

"People are reclaiming their neighbourhood streets. Biking, running and walking have increased in my neighbourhood. Car traffic is down. The streets are quieter. I can hear birds. Despite the chaos of the pandemic, there is a calm to these COVID-19 streets."

https://gehlpeople.com/blog/public-space-plays-vital-role-in-pandemic/

Though the impact of a coronavirus had been considered extensively, governments were ill-prepared, and the public doubted it would affect them at all. But it did, and fast. We responded and adapted to varying degrees, glimpsing important new possibilities along the way. In planning for a more sustainable future, supportive of general wellbeing, we now stand at a crossroads, with essential decisions to make.

Dr Lorraine D'Arcy and Sinead Flavin consider how behavioural change interventions might play a role in enabling people to make new and healthier mobility choices.

Commoovity – moving the community

Presenting authors and affiliation: Brendan Meskell, Colm Walsh, James Walsh, Kathleen Jacobi, Matthew McGuinness. MSc in Transport and Mobility students, Technological University Dublin

Commoovity is a behaviour change intervention aimed at increasing active travel and community participation in health and wellness promoting activities. All members of the community can participate regardless of gender, age and physical ability. The core idea is drawing people towards a meeting point, or hub, by bicycle or on foot to continue on to their destination in a group of cyclists or walkers. Commoovity consists of three main components: an online platform to connect people, an information campaign including community information events, and the actual hub facility being in place.

The hubs offer a focal point for active travel and community based activities involving walking and cycling, practical support and a place for people to meet and rest. They will provide a bicycle repair station, a bench, a drinking water fountain, a bin and a map showing key destinations and their distance. Light and CCTV will be provided where necessary. Desirable hub locations would be a safe area close to a main road, in the vicinity of local shops, schools or amenities. On the online platform people can create groups or join any group they think suits them.

People can tag and log their journeys either with the app. or electronic badges using QR codes located on the bicycle repair stations. These will be at low height and thus accessible to children and people in wheelchairs. Beside its practical features like connecting people and route finding, the app. will offer rewards for achievements and set new targets to keep people motivated.

Promoting cycling for transport: home truths and fallacies

Presenting author and affiliation: Dr Elaine Mullan, Lecturer, Waterford Institute of Technology

Everyday cycling for transport is one of the best ways to integrate physical activity into one's life and is a core part of the solution to the multiple problems generated by car use – traffic congestion, air pollution and greenhouse gas production. Ten percent of all regular trips were to have been by bicycle by now (NCPF, 2009-2020). The reality nationally is nearer 2% – though about 10% in Dublin (CSO, 2016). Where have we gone wrong? The following 'answers' are my own opinions, formed from many years as a cycling campaigner and critical digester of research on promoting cycling for transport (CFT).

First, we have dangerised cycling. Safety fears are the main barrier to CFT. However, for years, so-called 'road safety' campaigns have actually increased the danger for cyclists, and, at the same time, increased the fear of cycling, by putting the onus of responsibility for cyclists' safety on cyclists themselves. It is now well cemented in our collective mindset that helmets and hi-vis vests are essential to keep cyclists 'safe'. Indeed, a cyclist who fails to wear these can be accused of contributory negligence in the case of an RTA. This has meant that rather than doing what is most effective, that is, removing the hazards that are a danger to cyclists (e.g., HGVs, speeding; high traffic volumes) we have instead done what is least effective: left the hazard untouched while providing PPE to cyclists. It is not by chance that the countries with the highest rates of CFT have the lowest rates of helmet and hi-vis wearing.

Second, in seeking to control the cyclist, rather than manage or remove the hazards, we have tried to confine the activity to 'cycle lanes' that are not fit for purpose. To Dutch cyclists, the term cycle lanes means large, segregated, car-free, cyclist-only, well surfaced lanes that link where people live to where they need to go. We have none of these. To the Irish cyclists it means just a white line, a maximum of 1m out from the curb, where road debris collects, and drains/man-hole covers live, which stops abruptly 20m from the junction, or just randomly; with, perhaps, a bit of red tarmac added to improve visibility for cars (that will come off, in patches, after six months); which, in the end, is really an extra parking zone for vehicles. And such 'facilities' are squashed in only where they to do not impede the free movement of vehicles. These do more than just endanger the lives of cyclists who try to use them, they denigrate and demean the cyclist and cycling as a means of transport.

Third, having dangerised and demeaned cycling and cyclists, we are still shocked that they make up their own 'rules of the road' to suit themselves. We still expect the activity to occur within parameters that don't suit the user as they were designed to suit drivers. So, some dangerous activities, such as footpath cycling and running red lights, are risk reduction strategies for many cyclists and short-cuts and economies for others. These 'crimes' are constantly thrown back at cyclists and cycling advocates when they press for better infrastructure as a justification not to provide it. This scapegoating deflects attention away from the fact that Irish cycling infrastructure is planned through a windscreen shaped lens.

Ultimately, we are very resistant to change. As a nation of drivers, we know what we like, and we like what we know, that is, until the universe changes. The Covid19 crisis has brought quiet to our roads and streets and a 17% drop in GHG emissions, nearly half of which is due to reduced surface transport. Many European cities have decided to keep things this way, and now Dublin is trying too. Suddenly citizens who would raise objections to traffic calming on their local roads are now embracing their wholesale pedestrianisation! The future looks better!!

Oral presentation abstracts

Theme 5: Green prescriptions / meaning of health and nature

11.00

Chair: Cathryn Buckley Moderator: Dr Mary Jo Lavelle



Connecting with nature to benefit health and wellbeing **Dr Gesche Kindermann, Dr Catriona Carlin,** & Dr Easkey Britton, Post doctoral researchers, Near Health Project, Microbiology, NUI Galway



'A walk in the woods' An intervention of individuals with severe mental illness **Fran Ronan** & Dr C. Losty, Lecturer, Department of Sport and Exercise, Waterford Institute of Technology



Woodlands for Health – a nature-based intervention programme focused on green exercise in a forest setting Aisling Doherty, Mental Health Promotion Manager, Mental Health Ireland



Can access to green spaces during parkrun events contribute to the positive mental health of the participants? A literature review **Allison Dunne,** PhD Candidate, Sheffield Hallam University, UK



The meaning of open water swimming for adults in Ireland **Edel Murray,** Discipline of Occupational Therapy, NUI Galway

12.15 Interactive Q & A sessions via Zoom Meetings

Connecting with nature to benefit health and wellbeing

Presenting authors and affiliation: Dr Gesche Kindermann, Dr Catriona Carlin, & Dr Easkey Britton, Post doctoral researchers, Near Health Project, Microbiology, NUI Galway

NEAR Health was funded jointly by the Environmental Health Agency (EPA) and Health Service Executive (HSE) to investigate how Nature and Environment can help society Attain and Restore Health. We combined environmental, health, social innovation and medical fields to build capacity, develop and transform knowledge for communities, policy-makers and practitioners. We aimed to connect people with health enabling, blue and green nature spaces and to co-create inclusive nature-based activities to promote and restore health and wellbeing. Through this, we hoped that a deeper connection would help society to value and care for a healthy environment. In doing so, we collaborated with communities to co-create the outcomes of this research. We categorised stakeholders as promoters and providers of blue and green spaces, educators, decision influencers and policy-makers, active and potential blue and green space users, and health practitioners. We present an overview of our findings relating to (1) how people value and experience, nature, health and wellbeing, (2) the barriers and bridges to nature connection, (3) what people want from their healthy future environment, and (4) how nature-based activities can benefit health and wellbeing. This talk will focus on our key outcomes, including a toolkit, which is based on our research and includes the efforts of over 600 people. It outlines how we all can implement inclusive nature-based solutions to promote and restore health and wellbeing and help us to value and care for a healthy environment.



'A walk in the woods' An intervention of individuals with severe mental illness

Presenting authors and affiliation: Fran Ronan & Dr C. Losty, Lecturer, Department of Sport and Exercise, Waterford Institute of Technology

Introduction

Firstly, this study explored the impact of the 'woodlands for health' programme, with inactive adults who suffer from a range of mental illnesses. Understanding these relationships was an initial step in developing an effective green exercise promotion intervention with a targeted group and promoted physical activity as a nature-based therapy or treatment intervention for individuals with severe mental illness (SMI).

Methodology

The intervention was for twelve weeks, (n=29), at woodland walk venues. Within the investigation, four standardised, internationally recognised instruments measuring for the variable's mood states, self-esteem, well-being and physical activity were used. These included; the Profile of Mood States (POMS), Rosenberg Self-Esteem Scale (RSES, the Warwick-Edinburgh Mental Well-being Scale (WEMWBS), and the International Physical Activity Questionnaires (IPAQ).

Results

The intervention resulted in significantly higher levels of self-esteem and well-being, as well as an enhanced positive effect on physical activity levels and mood states and alleviated the effects of stressful daily lives while gaining the benefits of physical activity to improve confidence and mental well-being. (Mean scores from pre to post-intervention as follows: - POMS=10.94-15.54; RSES=13.36-18.20; WEMWBS=44.4-52.4; IPAQ =2126.24-2140.66).

Discussion

The results highlighted that overall improvement was made in all areas over the programme. In the variables of self -esteem and well-being, there was a significant improvement for the intervention group. Where there was a lack of significant improvement in the mood state and levels of physical activity.

Conclusion

The study underlined the relationship between the nature relatedness, motivational components of physical activity behaviour, and the area of physiological changes concerning the increase physical activity and the impact on the mortality and morbidity of people with SMI. The study promoted addressing the barriers that face more sedentary people with SMI, which would positively support interventions which enhance their well-being and quality of life (Stubbs & Rosenbaum, 2018).

Woodlands for Health – a nature-based intervention programme focused on green exercise in a forest setting

Presenting author and affiliation: Aisling Doherty, Mental Health Promotion Manager, Mental Health Ireland Other author and their affiliation: Dr Tadhg MacIntyre – GOGREEN research initiative Partnership programme with: Mental Health Ireland, Get Ireland Walking, Coillte

Introduction/Purpose

Woodlands for Health is a nature-based intervention programme focused on green exercise in a forest setting. The voluntary programme has been developed specifically for people with mental health difficulties. This programme adopts a recovery approach and aims to complement clinical interventions and /or recommendations from an individual's health care team and their careplan. This is central to the ethos and values of the national steering group for Woodlands for Health. In 2018, with the support from Dormant accounts funding, the national steering committee for the Woodlands for Health Programme (Mental Health Ireland, Get Ireland Walking, Coillte and The University of Limerick) embarked on evaluating the effectiveness of the programme for participants, led by Dr Tadhg McIntyre (UL, GOGREEN Initiative).

Method/Design/Approach

Standardised psychological instruments which are indicative of mental health and well-being (e.g. WHO-5 Well-Being Index; WHO, 1998) were included, in addition to a brief questionnaire on nature-relatedness (NR-6, Nisbet & Zelenski, 2013), demographic items and open-ended questions for participant feedback. The sample comprised over 150 participants at pre and post, largely derived from an overlapping sample.

Findings

The scores on the WHO-5 represented a 31% increase in self-reported wellbeing after the 12-week programme. The findings indicated a noticeable positive impact on wellbeing. Average Post-programme scores were above 70. A score at this level is above the threshold that suggests well-being may buffer against future mental health challenges. Nature relatedness scores were initially high for this sample indicating a prior positive perception of their connectivity to the natural environment. 10.8% increase in self-reported nature relatedness was demonstrated.

Discussion/Practical or Social Implications

The evaluation supports an improvement in mental health and wellbeing for people with lived experience of mental health difficulties. Access to green space and woodlands for walking can improve wellbeing nature relatedness for people with mental health challenges. Coillte provide optimal woodlands to help promote the benefits of physical activity and our connectedness to nature.

Recommendations

- Maintain the steady increase and roll-out of the programme where resources exist to maintain programme fidelity.
- Explore the option of 'blue exercise' and work with others engaged in stewardship of our natural resources.
- Provide training on dimensions of the programme to promote nature contact (e.g. Green Care Code).
- Evaluate the programme effectiveness through both qualitative means with an emphasis on the participant's voice and online-survey methods in future iterations.

Can access to green spaces during parkrun events contribute to the positive mental health of the participants? A literature review

Presenting author and affiliation: Allison Dunne, PhD Candidate, Sheffield Hallam University, UK

Other authors and their affiliations: Professor Steve Haake, Dr Alice Bullas & Dr Helen Quirk, Sheffield Hallam University, UK

Introduction/Purpose

Access to nature and green spaces are key ecological determinants of health. It has been shown that spending time in green space is important for maintaining good mental health. Parks allow people who are living in cities and towns to allow access to green spaces close to where they live. A UK-wide survey of 13,000 people found that a common reason for using a park is to attend a *parkrun* event. *parkrun* is a free, timed, 5km run or walk organised by local

volunteers. The events take place in parks, beaches and green spaces in 22 countries worldwide and are designed to be accessible to everyone in the local community. In the 15 years since *parkrun* began there has been research on how *parkrun* participation impacts individuals and local communities. This literature review summarises the results of the published research from the perspective of the effects on mental health, particularly in relation to the effect of green space on the mental health of *parkrun* participants.

Method/Design/Approach

A review of the published literature relating to *parkrun* and mental health was undertaken in a systematic manner. CINAHL, Google Scholar, Medline PsychINFO, Scopus, SPORTDiscus and Web Of Science were searched with the keyword "*parkrun*." No restrictions were applied for year published, language or country. Reference lists from the papers identified were also scanned. Studies were included if the subjects participated in *parkrun* (running, walking or volunteering) and the results included data on mental health or wellbeing. Determinants of mental health such as social support, community connection and sense of belonging were included when selecting papers.

Findings

The reviewer identified 13 peer reviewed papers and 3 editorials/opinion pieces, published between 2014 and 2020. Of the 13 peer reviewed studies, 9 had mental health outcomes and 4 described outcomes from the social determinants of mental health such as social capital. Only 3 publications included a specific mention of the green space or environment of the *parkrun* course. The instruments used to measure mental health varied between the publications so a meta-analysis was not possible. One study which considered the impact of the environment on the mental health of parkrun participants found that exercise in green spaces improved acute psychological wellbeing but the authors did not investigate the effects on long term mental health. The psychological effects did not differ across the four different types of setting (beach, grassland, riverside and heritage).

Discussion/Practical or Social Implications

The effect of *parkrun* on mental health is an area which has very little published research and no standardised method of measurement has been used. The impact of *parkrun* participation on mental health is clearly an area where more research is needed, particularly as communities balance the needs of housing and industry with the necessity for continued access to parks and green spaces.

The meaning of open water swimming for adults in Ireland

Presenting author and affiliation: Edel Murray, Discipline of Occupational Therapy, NUI Galway Other author and their affiliation: Jackie Fox, Discipline of Occupational Therapy, NUI Galway

Introduction

There has been an increase in swimming in natural bodies of water in Ireland as shown through anecdotal evidence (Fitzmaurice, 2017; Swain, 2019). However, limited academic research has explored this phenomenon (Foley, 2015). Being immersed in nature, exercising and being a part of a community contribute to better mental and physical health (Costello et al., 2019). There is a growing body of evidence promoting engagement in blue space which is beginning to filter into policy as seen in the Blue Gyms project in the UK (Depledge & Bird, 2009). The purpose of this qualitative study was to explore how adults attribute meaning to engaging with blue space through the medium of swimming.

Method

The interpretative phenomenological paradigm guided this research to understand the unique experience of open water swimming. Participants were selected purposively. Recruitment posters were used at frequently used swimming areas to access the swimming communities. Semi-structured interviews were used to explore to collect data. Interpretative phenomenological analysis was used to interpret the meaning that participants attributed to open water swimming.

Findings

Open water swimming was found to be a multi-faceted experience imbued with meaning. Participants (n = 5) reported swimming as a necessary occupation for promoting and maintaining mental and emotional wellbeing. Open water swimming provided opportunities to escape from the complexity of daily life and return to simplicity. It was noted that engaging with bodies of water facilitated the experience of presence. It was found that engaging with the ocean, metaphorically washed away negative emotions to create a "cleansed emotional state". All participants discussed the value of swimming and connection. Participants reported feeling connected to the social environment, noting the "sense of community". Participants reported a deep and meaningful connection to nature as they submerged themselves in water and ultimately felt a part of nature. Lastly, participants found that engagement with water paved the way to connecting with their true selves. Overall, open water provided participants with a context necessary for maintaining wellbeing and creating meaningful connections with others, nature and themselves.

Implications

This research contributes to the understanding of the meaning of open water swimming for adults in Ireland. This study contributes to the body of evidence on blue space. Having an understanding of the meaning that people attribute to swimming helps to better understand the relationship between health and our oceans. Active engagement in our oceans may promote positive mental and physical health benefits to a broader cohort in Ireland. This research provides an interesting view of open water swimming through an occupational lens. It provides a rationale for exploring nature-based solutions to engage people with natural environments as a sustainable health strategy.

Oral presentation abstracts

Theme 6: Equitable governance structures for sustainable healthy communities and environments

Chair: Dr Martin Power Moderator: Dr Elena Vaughan



Insights from ENERGISE **Professor Frances Fahy,** Geography, NUI Galway



GAA green clubs – the politics of place in the management of space **Dr Míde Ní Shúilleabháin,** Sustainability Officer, Croke Park Stadium



Climate change, health and Cork City: a dialogue for action **Denise Cahill**, Healthy Cities Coordinator Cork



Mapping the food system in Cork City - the first steps **Dr Janas M. Harrington,** Chair, Cork Food Policy Council; Senior Lecturer, School of Public Health, UCC



The Food–Environment Policy Index (EPI): monitoring and benchmarking government policies and actions to improve the healthiness of food environments in Ireland **Clarissa Leydon,** School of Public Health, University College Cork

12.15 Interactive Q & A sessions via Zoom Meetings

Insights from ENERGISE

Presenting author and affiliation: Professor Frances Fahy, Geography, NUI Galway

We are living in a rapidly changing world, where complex societal challenges such as climate change, inequalities, and unsustainable resource use are putting unprecedented pressures on our social and environmental systems. Addressing these urgent challenges requires radical changes in patterns of production and consumption at a pace and scale beyond what has been previously achieved. More than ever, robust scientific research and practice on transformational change is needed to promote a societal shift toward sustainable practices. It is now widely acknowledged that technological advancement by itself is not going to deliver the reductions in carbon emissions required to meet international obligations under the Paris Agreement to restrict global warming to 1.5 °C. Social and cultural change is and will be a key component in promoting a sustainable future.

The ENERGISE project, a European H2020 project led by NUI Galway since 2016, makes an important contribution to understanding what role households can play in transformations towards using energy more sustainably in domestic spaces. Working directly with academics, householders, practitioners, businesses and policy-makers, the project has been instrumental in developing a greater understanding of how and why people use energy in their everyday lives, and to what effect. This presentation provides a brief overview of the ENERGISE project from theory development, through to practice, and further reflections on lessons learned for policy, research and practice.

Win a mystery prize today, sponsored by the AHPI, by sharing our conference details on all your social media outlets and include #HPRC2020 @HPRC_NUIG. The winner will be judged on creativity, exposure, engagement and popularity of post.

GAA green clubs – the politics of place in the management of space

Presenting author and affiliation: Dr Míde Ní Shúilleabháin, Sustainability Officer, Croke Park Stadium

Other authors and their affiliations: Blánaid Carney, GAA Community & Health Department; Colin Regan, GAA Community & Heath Department; Jimmy D'Arcy, GAA Games Development

Introduction/Purpose

The GAA has partnered with local authorities across the island of Ireland to develop a Green Club Programme designed to support clubs and grounds throughout the country in identifying and implementing green measures in their clubs. The core mechanism of the programme is a Green Club Toolkit focussing on the areas of Energy & Water Management, Biodiversity, Waste Management and Travel & Transport. A major challenge of the Green Clubs programme beyond its pilot stage is the design of a communications and implementation structure that will encourage volunteer-based and frequently resourced-stretched clubs to adopt and promote the measures contained in the Green Club Toolkit.

Method/Design/Approach

In expanding the Green Club programme beyond its pilot stage, the GAA-Local Authorities Green Club Programme will draw on the extensive, community-based GAA club network. This paper explores how the potential for significant behavioural and operational change through the Green Club programme is linked not only to the geographic reach of the GAA club network but also to the place-based identity narratives that operate in local GAA communities. By drawing on the work of the affective power of place by Yi-Fu Tuan, David Harvey, Doreen Massey & Henri Lefebvre, it takes a geocritical approach in investigating how the rootedness in place of GAA communities can be mobilised in leading positive action in physical space.

Findings

The Green Club Programme is at an early stage and will be developed and tested through a number of pilot projects. Early engagement with a club- and county-based energy project in Tipperary suggests that the effectiveness of engagement though a club-and-county structure, rather than through the initially-planned national club structure, is not wholly due to the practical advantages of mapping onto existing administrative structures at these levels but owes much to a heightened engagement arising from the place-based narrative of club-and-county that is diluted at the broader national level.

Discussion/Practical or Social Implications

A better understanding of how the characteristics and operation of the affective power of place in the self-perception and decision-making of GAA clubs will aid in the development of a communications and implementation strategy for a wider roll-out of the GAA-Local Authorities Green Clubs programme. The success of the programme in supporting behavioural and operational changes in GAA clubs – from biodiversity enhancement plans to energy retrofits through waste reduction programmes – will require not only engagement through existing administrative structures at club and county level but also success in writing the programme's aims and actions into existing narratives of GAA, local and club identity.

Climate change, health and Cork City: a dialogue for action

Presenting author and affiliation: Denise Cahill, Healthy Cities Coordinator Cork

Introduction/Purpose

In an era of large scale migration, escalating urbanisation, growing diversity in populations, demographic change and aging populations, global warming, poverty and growing inequality, traditional responses are no longer adequate. Recognising that working in silos has limited capacity and impact Healthy Cities foster health and well-being through governance, empowerment and participation, creating urban places for equity and community prosperity, and investing in people for a sustainable and healthy planet. Cork Healthy Cities was well placed as an inter-agency to develop a collaboration between the Environmental Research Institute, University College Cork, the Environmental Protection Agency, SHEP Earth Aware and EcCoWeLL Cork to focus on the context and science of climate change with a specific emphasis on action at local level. These actions were embedded in the implementation of the Cork City Climate Adaptation Policy and the Cork Healthy Cities Action Plan 2020 – 2030.

Method/Design/Approach

A seminar was organised and attended by 100 people from a variety of sectors including local authority staff, architects, academics, planners, community and voluntary sectors, academia, health professionals and citizens using the open space methodology. 'Open Space' is a powerful tool for engaging large groups of people in discussions to explore particular questions or issues. The seminar was designed to provide a platform for multiple stakeholders to develop an understanding and a capacity to respond to the key challenges for public health in the context of a changing climate in Cork City to:

- Stimulate broad discussion on the key public health challenges for Cork City in a changing climate
- Explore and discuss the opportunities for action to promote health in Cork City in the context of a changing climate
- Identify key inter-agency action areas for the implementation of the Cork City Adaptation Strategy and Cork Healthy Cities Action Plan 2020 2030.

Findings

Feedback was collated and local actions were summarised under the following 8 headings:

- 1. Transport
- 2. Air Quality
- 3. Energy
- 4. Food System
- 5. Water
- 6. Biodiversity and Green Infrastructure
- 7. Emergency Response & Extreme Weather Events
- 8. Health as a Lever for Climate Action.

These actions have been adopted by Cork Healthy Cities Action Plan 2020 – 2030 for implementation. Policy level actions have been

Discussion/Practical or Social Implications

Linking the concept of sustainability to a holistic approach that integrates economic development, social inclusion, public health and environmental sustainability raises a raft of questions about governance and how integration can be achieved. Utilising public health as a lever to engage individuals in a dialogue about climate change proved very effective.

Mapping the food system in Cork City - the first steps

Presenting author and affiliation: Dr Janas M. Harrington, Chair, Cork Food Policy Council; Senior Lecturer, School of Public Health, UCC

Other authors and their affiliations: Denise Cahill, Tomás Kelly on behalf of the Cork Food Policy Council

Introduction

Urban cities host over half the world's population with the projection of increasing further in the foreseeable future. In the context of a rapidly urbanizing world, the global food systems challenges have become serious challenges for cities. Thus, cities have the potential to have a key role in addressing these challenges for their own populations and for the global community. Indeed, the UN Sustainable Development Goals blueprint highlights the need to 'make cities and human settlements inclusive, safe, resilient and sustainable. To confront these issues many urban cities and local governments have developed urban food policies.

The Cork Food Policy Council (CFPC) is an inter-agency structure in Cork City. The CFPC is a partnership between representatives of the community, food retail, farming, fishing, restaurant/catering, education, environmental and health sectors and local authorities. The overall aim of the CFPC is to work towards the achievement of a fairer, healthier, more secure and sustainable food system within the City and throughout the region.

Approach

To address these issues, the CFPC is working towards outlining a profile of the food system in Cork. Working through established partnerships the CFPC is identifying the food related challenges in the city to inform the development of an action plan/strategy to address these challenges. Phase 1 of this strategy was to catalogue food businesses in Cork, map their locations and publish this information via an online visualisation platform (<u>http://corkfoodmap.appspot.com/</u>). Further, the types of food businesses across the city and the patterns relating to where they are located was described.

Findings

Just under half (49%) of all small areas in Cork City have a restaurant/takeaway or takeaway within 400m and 12% have more than 6 within walking distance. The majority of small areas in the 'northside' region of Cork City have at least one takeaway within 400m. Also notable is that 1 in 3 schools is within walking distance of a fast food outlet, exposing schoolchildren to these foods on a regular basis from an early age. The Cork Food Map is being used to look at the types of food marketing that is advertised in close proximity to schools. The analysis found that the majority of products advertised within a 500m radius of selected schools is unhealthy and of low nutritional value. Coupled with the density and type of food retail outlets in these neighbourhoods the findings highlight the unhealthy environmental exposures of children and adolescents in Cork City.

Practical Implications

This work highlights the importance of tools like the food map to provide objective evidence to inform policy to reduce the impact of the toxic food environment on the health and wellbeing of citizens of Cork. The map is the first step towards the development of a food strategy for Cork City.

The Food–Environment Policy Index (EPI): monitoring and benchmarking government policies and actions to improve the healthiness of food environments in Ireland

Presenting author and affiliation: Clarissa Leydon, School of Public Health, University College Cork

Other authors and their affiliations: Dr Janas M. Harrington, Charlotte Griffin, Professor Ivan J. Perry, School of Public Health, University College Cork

Background

Governments worldwide recognise the importance of a good diet for health and wellbeing and the prevention of chronic disease. In this regard, effective government policies are essential to increase the healthiness of food environments and to reduce obesity, NCDs, and their related inequalities. Many countries, including Ireland have implemented policy actions to address this priority. However, while accepting that effective policies and actions are essential to increase the healthiness of food environments, monitoring the degree of implementation of these policies and actions and mapping the interaction across the food system is an important part of ensuring progress towards better nutritional health, healthier food environments and thus reducing the burden of NCDs. The aim of this project is to conduct a Food-Environment Policy Index audit in Ireland to assess the level of food policy implementation and compare to the extent of implementation of national government policies and actions for creating healthy food environments against international best practice.

Methods

The Food Environment Policy Index (Food-EPI) is an established methodological framework for the assessment, analysis and benchmarking of public policies influencing food environments, developed by INFORMAS, a global network of public-interest organizations. A panel of public health experts rated the extent of Irish government implementation against international best practice for 42 indicators of food environment policy and infrastructure support in an online rating survey. For each indicator experts were asked to rate the level of implementation from high (80-100%) to 'little/no implementation' (0-20%). The ratings were informed by documented evidence, validated by government officials and international benchmarks. During a one-day workshop the expert rating panel identified potential policy actions based on the ratings and in a subsequent online survey the expert panel prioritised these actions.

Results

There was a high level of implementation of some indicators including: aspects of food promotion (restricting unhealthy promotion to children in broadcasting); evidence informed food-based dietary guidelines and monitoring obesity and NCD rick-factors. However, there are a number of areas where Ireland's level of implementation was rated as low and below that of international best practice, including food composition targets of out-of-home meals; unhealthy food promotion to children on packaging; healthy public procurement standards. Based on implementation gaps experts identified 39 actions and 10 of these were prioritised including: policy gaps in relation to food prices (*income support programmes for vulnerable population groups, implementing and ring-fencing proceeds for healthy food subsidies*), food retail (*legislate on "no fry zone" within 400m of schools*) and food provision (*nutrition standards for schools and public sector*); infrastructure actions necessary to support healthy Food Environments in health policies (*i.e. a co-ordinated approach to address social inequalities in food and nutrition*) and platforms for interaction (*forum for policy makers and researchers to exchange information on key policies*).

This work provides for the first time benchmarking of Irish food policies against international best practice. It has highlighted areas for potential Government action to improve the Irish food environment.

Ask me

If you have any questions or difficulties on the day the following troubleshooting links may be of help:

Can't access the conference

When you registered online you were required to enter your email address. An automatic registration confirmation was issued to this email address. The link to the day's event page is sent to this email the day before the event and is used to access the conference presentation videos, webinars and discussion meetings.

If you did not receive your automatic confirmation email after registering you may have entered your email incorrectly. Contact us by email: <u>hprcconference@nuigalway.ie</u> and we can check for you.

Using Zoom to join the conference

Tips on using Zoom to join the conference are available here:

'<u>Using Zoom to join the conference'</u>

If you are having problems joining a meeting or webinar

If you are having problems with audio and video

If you are having problems with your video/ camera_

Any further problems - <u>Zoom FAQs</u>

Trouble viewing the presentations

- 1. Have you watched a video on this device before? If yes then follow the trouble shooting tips below:
- 2. Try a different browser. If you're not already using Google Chrome or FireFox, we recommend using it, as we've found it works best for the presentations.
- 3. Clear your browser's cookies and cache and restart it before trying again.
- 4. If you have a lot of browser tabs open, close most of them except the one you're using to watch the presentations.
- 5. Ensure another member of your householder is not steaming, playing games or video calling.
- 6. If you can't hear any audio, double check to see that the player volume is turned up and that the video is not muted. Check the sound settings on your device.
- 7. Restart your computer and network devices (modems/switches/routers).

Other issues

Any other issues please contact us on our email: <u>hprcconference@nuigalway.ie</u> or phone (on the day only) 091-493108.

Contact Us

Will the presentations be available online after the event?

All of our presenters have been asked to give their approval for their presentations to be available online after the event. Those presentations which have their author approval will be available next month and we will inform you when they are released.

Conference evaluation

We would like to hear your comments on the day. A survey will be forwarded by email after the conference to check we met the needs and expectations of our delegates. Please spare a few minutes to complete this survey.

Keep in touch

If you would like to receive communications about future Health Promotion conferences and other events please send an email to <u>hprc@nuigalway.ie</u> with the subject heading 'add me to event list'.

Our contact details

Dr Mary Jo Lavelle and Dr Lisa Pursell 2020 Co-conference Chairs Discipline of Health Promotion National University of Ireland Galway University Road, Galway

Dr Viv Batt Administrative Director Room 1-005, Health Promotion Research Centre National University of Ireland Galway University Road, Galway

Tel: 00 353 (0)91 493108 Email: hprc@nuigalway.ie Web: <u>www.nuigalway.ie/hprc</u> Twitter: @HPRC_NUIG