



FACULTY OF PUBLIC HEALTH MEDICINE

ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

Faculty of Public Health Medicine Winter Scientific Meeting 2022

7th December 2022

[Abstract](#)
Oral Presentation

A NATIONAL SURVEY OF PUBLIC ATTITUDES TOWARDS FINANCIAL INCENTIVES AS A SMOKING CESSATION INTERVENTION

Ellen Cosgrave

Department of Public Health Area C, Health Service Executive, Lacken, Co. Kilkenny.

Co Authors: Aishling Sheridan, Edward Murphy, Martina Blake, Rikke Siersbaek, Sarah Parker, Sara Burke, Frank Doyle, Paul Kavanagh

HSE Tobacco Free Ireland Programme, Centre for Health Policy and Management, School of Population Health, Royal College of Surgeons in Ireland, Jervis House, Dublin 1.

Abstract

Innovative approaches to tackling behavioural risk factors for non-communicable diseases are urgently required. Financial incentives for smoking cessation improve cessation rates and effects appear to be sustained after incentive withdrawal. However, concern about the acceptability of such incentives is a barrier to widespread adoption. To inform implementation, this telephone-delivered cross-sectional survey aimed to assess acceptability of financial incentives among a representative sample of the Irish public recruited via random digit-dialing. Prevalence of support for smoking cessation incentives was measured; logistic regression determined factors associated with key responses.

Response rate was 30% (N=1,000, post-hoc weighting applied). Approximately half (47.0%, 95% Confidence Interval (CI) 43.9%-50.1%) supported at least one type of financial incentive for smoking cessation. Public support for financial incentives via shopping vouchers (43.3%, 95% CI 40.3%-46.5%) was higher than support for incentives via cash payments (32.1%, 95% CI 29.2%-35.0%). Most (60.6%) of those who supported incentives believed the maximum amount rewarded to quitters should be under €250. Versus their comparative counterparts, those of lower educational attainment (adjusted Odds Ratio (aOR) 1.49, 95% CI 1.10-2.03) and tobacco/e-cigarette users (aOR 1.43, 95% CI 1.02-2.03) were more likely to support financial incentives.

This study demonstrates Irish public support for financial incentives. It highlighted that value and type of incentive delivery will be important factors in designing an intervention for the Irish context. There is an opportunity to build on higher support among those with greatest health needs to facilitate intervention uptake. Wider stakeholder consultation including input from service users and providers is needed to further inform effective implementation.

EVALUATION OF SLAINTECARE “SMOKE FREE START” INITIATIVE

Paul Kavanagh

National Health Intelligence, Strategy and Research Department, Strategic Planning and Transformation, Jervis House, Dublin

Co Authors: Aishling Sheridan, Edward Murphy, Elaine Buckley, Angela Dunne, MaryJo Biggs

HSE Tobacco Free Ireland Programme, National Women & Infants Health Programme.

Abstract

Smoking in pregnancy is a leading public health challenge. National and international studies highlight urgent need to improve stop smoke care in pregnancy. This care gap was highlighted in National Maternity Strategy (2016–2026) and an evidence-based care pathway was established in new National Stop Smoking Guidelines (2022). The pilot implementation Q3 2020-Q3 2021 of this new pathway supported through Sláintecare Integration Funding in two maternity hospitals was evaluated by an uncontrolled before-and-after study of process and impact measures using mixed methods.

Interventions included: Local Implementation Teams; dedicated trained and certified Stop Smoking Midwife; implementation of QUITManager (an electronic stop smoking care record); Making Every Contact Count training for midwives; routine breath carbon monoxide tests (BCOT) with opt-out referral to stop smoking care for women who smoke; information resources for women and staff. COVID-19 meant that routine BCOT was paused for infection control reasons. QUITManager measured care processes and outcomes. Semi-structured interviews were conducted with a purposeful sample of service users and providers.

In total, 691 women were referred to specialist Stop Smoking Midwives, 2.8% and 7.0% of births in each pilot site. Referrals were accepted by 81.6% of women, 23.4% set a quit date and 18.2% were quit at 4 weeks (intention to treat analysis), with 14.5% of women delivering a smoke-free baby.

The new pathway was generally positively received by women and midwives; however the importance of communication, and the contrast for women between fear of judgement up-front versus experience of sensitive and non-judgmental support were key themes relevant to wide-spread implementation.

Proof-of-concept and lessons learned will inform and support national roll-out, including BCOT to improve referrals.



Ir Med J; May 2023; Vol 116; No. 6; P800
29th June, 2023

LEAVING NOBODY BEHIND: WIDENING SOCIO-ECONOMIC INEQUALITIES IN SMOKING AS IRELAND MOVES TOWARDS BEING TOBACCO-FREE

Paul Kavanagh

National Health Intelligence, Strategy and Research Department, Strategic Planning and Transformation, Jervis House, Dublin 1

Co Author's: Edward Murphy, Aishling Sheridan, Martina Blake

HSE Tobacco Free Ireland Programme, HSE Tobacco Free Ireland Programme, HSE Tobacco Free Ireland Programme

Abstract

Despite progress, smoking remains the leading preventable cause of disease in Ireland. The ESRI recently reported a two-fold difference in standardized mortality across socio-economic groups (SEGs) in Ireland. Smoking is more prevalent in lower SEGs, and international evidence suggests smoking differences drive half this mortality gap. As Ireland pursues a tobacco-endgame goal, close attention to inequalities in smoking is required. This study describes recent trends in smoking prevalence across SEGs in Ireland to inform priorities for equitable tobacco-endgame planning.

Secondary analysis of Healthy Ireland Surveys 2015 to 2021 was conducted (response rates 51-61%). Trends in crude smoking prevalence were measured by SEG. Adjusting for differences in age and gender across groups, logistic regression compared the adjusted odds (aOR) of smoking in lower SEGs relative to higher SEGs across period.

The gap in crude smoking prevalence across SEGs was 12.5% in 2015 (16.2% higher SEG vs 28.7% lower SEG); the gap increased to 20.1% in 2021 (10.6% higher SEG vs 30.7% lower SEG). After adjustment for age and gender, in 2015, compared to those in the higher SEG, those in the lower SEG were 2.1 times more likely to smoke (aOR 2.1, 95% CI 1.9–2.5, $P < 0.0001$); in 2021, compared to the higher SEG, those in the lower SEG were 3.7 times more likely to smoke (aOR 3.7, 95% CI 3.0–4.4, $p < 0.0001$). A significant reduction in adjusted odds of smoking across the period was observed only in higher SEG (aOR 0.58, 95% CI 0.48 – 0.71, $p < 0.0001^*$); no significance difference was observed in other SEGs.

Widening smoking-related inequalities mean people in lower SEG risk being left behind in a Tobacco-Free Ireland. Intensification of pro-equity measures (including stop-smoking support, tackling tobacco retail and higher tobacco tax) nationally and locally is required.

PUBLIC HEALTH MANAGEMENT OF THE FIRST MONKEYPOX CLOSE CONTACT IN IRELAND

Christopher Carroll

Area B Department of Public Health, HSE

Area B Department of Public Health, HSE, Department of Public Health Area B-CHO7, Dr
Stevens' Hospital, Dublin 8

Co Author's: Zaza Abidin, Fionnuala Cooney

Abstract

A global monkeypox outbreak was declared a Public Health Emergency of International Concern in July this year. Prior to the onset of cases from May 2022, previous outbreaks in endemic countries were associated with high case fatality rates. The initial Public Health management of monkeypox outside of endemic countries was informed by experience from travel associated cases in recent years where secondary transmission was rare and not sustained.

On 09/05/2022 the CHO 7 Public Health team in the Area B Department of Public Health were advised by the HPSC of the first close contact of a case of monkeypox residing in Ireland.

The contact had been on a long-haul flight with the index case, seated 3 rows away. The management of the contact was agreed at an Incident Control Team meeting chaired by HPSC on the same day. Specific Public Health actions included providing the contact with tailored advice regarding their exposure and the symptoms of monkeypox, organising a courier to deliver a thermometer for twice daily temperature monitoring and arranging for a "burner phone" to be designated so they could contact Public Health out of hours should they become symptomatic. The event triggered high level emergency planning including a meeting of the High Consequence Infectious Disease Operational Coordination Group which agreed a step-by-step process for the management of a suspected case. The contact remained asymptomatic for the period of surveillance.

A review of the management of the first close contact of monkeypox in Ireland provides a valuable insight into the need for a time-sensitive Public Health approach when responding to unique health protection threats, including co-operation between regional departments and the HPSC. It also demonstrates the progress made to date in developing evidence-informed monkeypox contact tracing guidance for an Irish context.

EVALUATION OF PILOT ELECTRIC BIKE SCHEME FOR PERSONS WITH CYSTIC FIBROSIS

Ginikanwa Atueyi

School of Public Health, Physiotherapy and Sports Science (SPHPSS), University College
Dublin

Co Author's: Sarah Tecklenborg, Samantha Byrne, Rory Tallon, Patricia Fitzpatrick,

Cystic Fibrosis Ireland, Cystic Fibrosis Ireland, Cystic Fibrosis Ireland, School of Public
Health, Physiotherapy & Sports Science, University College Dublin, Belfield, Ireland

Abstract

Exercise provides potential beneficial effects including airway clearance, improved physical capacity and quality of life in Cystic Fibrosis (CF). There is no previous study on the use of electric bicycles (Ebike) for exercise by persons with CF (PwCF). The aim of this study was to document the uptake and feasibility of E-bikes in PwCF.

CF Ireland ran a pilot E-bike scheme for adult PwCF aged 18 or over living in Ireland. There were 44 applications received for 20 available E-bike grants. Pre and post questionnaires assessed participant attitudes toward E-bike use at baseline and 3 month-follow-up. Pre and post E-bike use data on 14 PwCF involved in the pilot were available. Data was unavailable due to participant withdrawal from the pilot (n=4) or illness (n=2). E-bike use improved participant physical activity after 3 months follow-up although this change was not significant. The number of journeys on an E-bike was significantly greater in those with low baseline FEV1 (<70) than in those with higher baseline FEV1 (70+) (Mean ranks of 9.8 journeys vs mean ranks of 5.2 journeys, $p=0.038$).

A greater proportion of participants agreed that E-bike enabled them to exercise often ($p=0.031$) and catch up with friends and families during cycling ($p=0.687$). The number of conflicts encountered with cars during E-bike rides was greater in females than in males ($p=0.042$). Females also reported more conflicts with pedestrians, buses and bicycles while males reported more conflict with animals, although these were not significant. Total hours of exercise did not change at follow-up.

A LARGE OUTBREAK OF INTESTINAL DISEASE LINKED TO A PUBLIC WATER SUPPLY IN IRELAND: ECHOES FROM THE PAST AND LESSONS FOR THE FUTURE

James Gilroy

Area C Department of Public Health, Kilkenny

Co Authors: Carmel Mullaney, Collette O'Hare, Catherine Lynch,

Area C Department of Public Health, Area C Department of Public Health, Area C
Department of Public Health

Abstract

We present the findings of a review of the public health management of a large outbreak of intestinal disease linked to a public water supply. From 19 August 2021, there was a catastrophic failure of treatment processes at the Creagh Water Treatment Plant (WTP) in Gorey, Wexford, resulting in the discharge of inadequately treated water into the public supply for a period of 4 days.

Following a delayed recognition, and notification to relevant stakeholders, of the incident at the WTP, management proceeded via an initial incident control team and then an outbreak control team. The outbreak was declared over on 18 September 2021, 25 days after the incident at the WTP. The outbreak occurred at a time of significant capacity constraints in the Department of Public Health, due to the ongoing management of Covid-19 pandemic incidents and was managed in addition to ongoing pandemic work.

In total, there were 54 instances of laboratory confirmed infections linked to the outbreak, in 46 individuals, with 37 cases of VTEC as a single agent, 8 coinfections with *Campylobacter*, 1 coinfection with Rotavirus. and one case of Giardiasis. Among the VTEC single-infection cases, 13 (35%) accessed diagnosis via their GP, 6 (16%) attended a Hospital ED and 9 (24%) were admitted to a hospital for management. We were not aware of any cases of Haemolytic Uraemic Syndrome. There were 20 people who were excluded from work or childcare pending microbiological clearance.

This review presents findings from the largest outbreak of VTEC linked to a public water supply in Ireland in recent times. Key learning points include the delay in notification to the HSE, the criticality of the source water for the WTP and the issuing of communications after the incident at the WTP. The findings will be discussed alongside useful parallels from a large VTEC outbreak in Walkerton, Ontario in 2000.

THE BURDEN OF SELF-HARM BY HANGING AND DROWNING IN IRELAND 2007-2019: A
NATIONAL REGISTRY-BASED STUDY

Philippa White

Department of Public Health HSE-South.

Co Authors: Paul Corcoran, Eve Griffin, Ella Arensman, Peter Barrett

National Suicide Research Foundation, National Suicide Research Foundation, National
Suicide Research Foundation, Department of Public Health Area D (Cork/Kerry)

Abstract

Previous self-harm is the strongest risk factor for suicide. Attempted hanging and drowning are associated with a higher risk of suicide than most other self-harm methods. This study aims to measure the burden of hospital-treated attempted hanging and drowning in Ireland in 2007-2019 and identify risk factors for attempted hanging and drowning, and repetition of self-harm by these methods.

Data on all self-harm presentations to Irish hospitals between 2007 and 2019 were obtained from the National Self-Harm Registry Ireland, a national self-harm surveillance system. Multinomial and logistic regression were used to explore factors associated with attempted hanging and drowning and repetition of these self-harm methods.

The age-standardised incidence rate of attempted hanging and drowning increased by 126% and 45% respectively between 2007 and 2019. The incidence of both self-harm methods was highest among young people aged 15-24 years. The odds of presenting to hospital for attempted hanging were higher in males (aOR 2.85, 95% CI 2.72–3.00), homeless individuals (aOR 1.32, 95% CI 1.16–1.49) and those living in Dublin (aOR 1.23, 95% CI 1.17–1.29). The odds of presenting to hospital for attempted drowning were higher in males (aOR 1.68, 95% CI 1.58–1.78) and homeless individuals (aOR 2.69, 95% CI 2.41–2.99). Repeated hanging and drowning attempts were highest among homeless individuals.

The burden of self-harm by hanging and drowning has been increasing in Ireland. The incidence is highest among young people aged 15-24 years. Males and homeless individuals appear to be at highest risk and may warrant targeted preventive interventions.

Blinkers Required: A Rapid Review and Gap Analysis of Gambling Marketing and Advertising Strategies and Recent Changes in Gambling Behaviours in Euro

Kevin McMahon

University Hospital Limerick / National College of Ireland.

Co Authors: Prof Ronnie Moore, Dr Elina Mukhametshina

University College Dublin, Kazan State Medical University

Abstract

Gambling has existed for thousands of years in settings a far cry from those typically seen in your local cinema depicting lavish scenes in Las Vegas or Monte Carlo. From the drawing of lots by Roman soldiers for Christ's robes to wagers being placed on football in the early Han dynasty of China, gambling has impacted many generations around the world.

Since the turn of the millennium, the gambling industry has undergone significant changes as it has embraced new technologies enabling the creation of online platforms which have altered business models and the functioning of operators. Through modern technology, particularly mobile phones and other portable devices, consumers now have access to websites and applications specifically configured for gambling. Convenient and easily accessible, gambling is now as simple as pushing a button.

This review of 101 publications has noted that the advent of this technology has altered the way in which professional gambling promoters have chosen to construct their marketing strategies and the promotion of services to existing and potential customers. Resultant changes in the behaviours of those who gamble and types of gambling taking place are evident, the impact of which on individuals, communities and societies accompanying these developments requiring further in-depth examination.

This paper addresses some of these significant issues, including important gaps relating to the methodology of existing research where a shortage of longitudinal data persists and examinations of gambling's societal benefit and costs, as well as the wider general knowledge base relating to,

a) gambling, b) gambling prevention programmes, and c) marketing, advertising and emerging trends.

This gap analysis is required to ensure effective regulation and public health policy in order to counteract gambling-associated harms.

Omnipresent: Online Gambling in Ireland

Kevin McMahon

University Hospital Limerick / National College of Ireland

Co Author's: Dr Paul Hanly

National College of Ireland - Economics Department

Abstract

The gambling industry (GI) has enthusiastically embraced online and mobile gambling in the 20 years, resulting in a fundamental change in types of gambling products offered and resulting gambling behaviours. A persistent lack of knowledge about the impacts that such changes are having on individuals, communities and societies persists. Online gambling is known to have significant associations with increased risk for disordered gambling behaviours, with specific analysis of online gambling and multi-modal gambling being sparsely examined in Ireland and the wider European region.

Accessing the dataset from the Health Research Board's gambling sub-section of the 2019-20 National Drugs and Alcohol Survey enabled analysis of 152 online gamblers within 5762 total respondents. Individual analysis of respondents' problem gambling severity, gambling behaviours across specific gambling activities, gambling frequency, average monthly expenditures and socio-demographics was performed with comparisons made to those who do not gamble online and all gamblers cumulatively. Linear regression analysis was performed relating to online gamblers and predictors of increased gambling severity.

Significant results related to the presence of multi-modal gambling and increased gambling severity in at-risk or problem online gamblers when compared to non-online at risk or problem gamblers. Regression analysis demonstrated a positive relationship between multi-modal gambling, male gender and online gambling.

Further research with larger, more representative datasets of online gamblers is needed to establish the extent of online and multi-modal gambling's impact in Ireland and potential public health policy implications. Specific examination of the extent to which multi-modal gambling and online settings as an independent risk factor for risky and disordered gambling is recommended.

A PROCESS TO PRIORITISE NON-COVID-19 NOTIFIABLE INFECTIOUS DISEASES FOR THE NATIONAL SEROSURVEILLANCE PROGRAMME FOR 2022 – RESULTS AND IMPLICATIONS

Ciara Kelly

PricewaterhouseCoopers Ireland, Dublin, Ireland, 2HSE-HPSC, Dublin, Ireland

Government/Health Consulting

Co Authors: Thomas Roux, Katie O'Brien, Laurin Grabowsky, Jennifer Doyle, Simon Bergin, Liam Murray, Eimear Hayes, Derval Igoe

Department of Public Health, Public Health Area C, Health Service Executive, Dublin, Health Protection Surveillance Centre, Dublin.

Abstract

The National Serosurveillance Programme (NSP) was established in 2021 with an initial focus on COVID-19. To inform selection of non-COVID-19 notifiable diseases for serosurveillance by the NSP in 2022, a prioritisation process was developed by the NSP Seroepidemiology Unit. This study describes the process development, results and public health implications.

To inform selection of diseases for prioritisation and process methodology, a rapid evaluation of national serosurveillance literature, international serosurveillance programmes and public health prioritisation tools was completed. An adapted multi-criteria decision analysis was selected as the methodological approach, using the Qualtrics survey platform. Nine notifiable infectious diseases were selected for prioritisation through a systematic process. Participants were required to score each disease independently across five bespoke criteria (burden of disease, potential for health gain, limitations of serological tests, budgetary factors, contextual factors). Eight stakeholder groups (n=261) with relevant expertise in health protection were invited to participate in the prioritisation process over a 2.5-week period (April 27th 2022 - May 13th 2022). Scores were then totalled, and diseases ranked by score.

There were 33 valid responses to the Qualtrics survey across the eight stakeholder groups (adjusted response rate 13.7%). HIV received the highest score, followed by Hepatitis C, Hepatitis B, Measles, Chickenpox, Mumps, Rubella, Hepatitis A and Hepatitis E.

The results of the prioritisation process were presented to and reviewed by the NSP Steering Committee in June 2022, with consideration of relevant factors and current public health concerns. Measles was selected for serosurveillance. Commencement of the first cycle of data collection for measles is planned for Q4 2022.

THE DEVELOPMENT OF IRELAND'S FIRST HEALTH SERVICE EXECUTIVE HEALTH PROTECTION STRATEGY 2022-2027: APPROACH AND LESSONS LEARNT.

Ciara Kelly

PricewaterhouseCoopers Ireland, Dublin, Ireland, 2HSE-HPSC, Dublin, Ireland.

Co Authors: Lorraine Doherty, Joan Gallagher, Lola Odewumi, Mary E Black, Kristin Concannon, Robert Conway, Louise Marron

Strategic Public Health, Office of Chief Clinical Officer, Health Service Executive, Dublin, Ireland, National Health Protection, HSE-HPSC, 25-27 Middle Gardiner Street, Dublin, Ireland.

Abstract

The COVID-19 pandemic highlighted the importance of strengthening the health protection function within Public Health. From January to October 2022, the then National Clinical Director for Health Protection (NCDHP) led the development of Ireland's first Health Protection Strategy 2022-2027. This study describes the approach for the development of the strategy and lessons learnt.

In January 2022, the NCDHP convened a Strategy Development Team (SDT) and multi-disciplinary Strategy Development Steering Committee (SDC). The SDT prepared a briefing paper exploring the context for a national health protection strategy. Stakeholder analysis was conducted to inform the consultation approach. An experienced external facilitator facilitated two SDC consultation workshops (March and June 2022). Workshop #1 focused on defining the strategic vision, aim, and objectives. Workshop #2 verified objectives and identified enablers. A subsequent e-consultation invited feedback from key stakeholders (July 2022). Consultation outputs guided the strategy's development.

The strategy, published 13th October 2022, outlines 10 strategic objectives and 11 enablers identified as necessary to achieve these objectives. Strengths of the strategy development approach included multidisciplinary SDC input and oversight, review of the national and international policy context, stakeholder involvement, and a comprehensive consultation plan developed with experienced external facilitator input.

The development of the HSE Health Protection Strategy 2022-2027 is a critical step to ensure a clear framework for the delivery of national health protection functions. Progression of strategy implementation will require further stakeholder engagement, development of implementation plans, and establishment of a monitoring and evaluation framework, including annual review of strategy implementation.

"THINK TWICE BEFORE YOU PUT A MATCH TO IT" COLLABORATIVE COMMUNITY
ENGAGEMENT TO DEVELOP TARGETED HEALTH MESSAGING RESOURCES

Lucinda Ryan

Department of Public Health Area B-CHO7, Dr Steevens' Hospital, Dublin 8.

Co Authors: Mary-Brigid Collins, Doireann Crosson, Jonathan Fay Watt, Carla Jakes, Shay
L'Estrange, Ruth Mary McDermott, Fionnuala Cooney

Pavee Point Traveller & Roma Centre, Dublin 1, HSE Social Inclusion, Dublin, Ballyfermot
Chapelizod Partnership, Dublin 10, Ballyfermot Traveller Action Project, Dublin 10,
Department of Public Health, Dr Steevens' Hospital, Department of Public Health Area B-
CHO7, Dr Steevens' Hospital, Dublin 8.

Abstract

Irish Travellers are a minority ethnic group who experience many social and health inequities. Travellers can live in a range of, often overcrowded, accommodation, and Census 2016 reported 39% of Travellers in Ireland are effectively homeless. A recent hepatitis A outbreak at a Traveller accommodation site in Dublin highlighted issues regarding pest infestation, poor sanitation, illegal dumping and burning of waste. Of particular concern, due to well documented adverse health effects, is the burning of plastic and electrical cables to extract valuable copper. (WHO 2021)

In addition to meetings with the city council, environmental health and local Traveller organisations to address onsite sanitation and waste issues, the local Director of Public Health convened a group to develop targeted health messaging.

This comprised the Eastern Region Traveller Health Unit, including representatives from national Traveller and Roma non-governmental organisation Pavee Point Traveller and Roma Centre, local Traveller organisations/Primary Health Care Workers Projects and HSE social inclusion colleagues.

The group worked collaboratively to craft a leaflet and script a two-minute video suitable for dissemination on social media, encompassing five key tailored public health messages around the health dangers of burning waste.

The video was voiced by a member of the Traveller Community and filmed at a Traveller accommodation site, local fire brigade station and fire brigade training site with input from all stakeholders.

Two complementary health messaging resources were produced and disseminated locally and nationally by Traveller Primary Health Care Projects.

This is an example of how engaging directly with Traveller organisations and in-reach activities can facilitate the production of high quality, tailored, appropriate and acceptable health messaging information.

THE FEASIBILITY OF ATRIAL FIBRILLATION SCREENING IN PRIMARY CARE IRELAND; RESULTS OF A PILOT SCREENING PROGRAMME

Aileen Callanan

School of Public Health, University College Cork, Department of General Practice, University College

School of Public Health

Co Authors: Claire Buckley, Colin Bradley, Diarmuid Quinlan, Patricia Mary Clare Kearney

School of Public Health, University college Cork, Health Service Executive, Cork. Department of General Practice, University College Cork. Irish College of General Practitioners.

Abstract

Background: Atrial fibrillation (AF), a common, frequently asymptomatic cardiac arrhythmia is a major risk factor for stroke. Identification of AF enables effective preventive treatment to be offered with potential to reduce stroke risk by up to two thirds. While there is international consensus that opportunistic AF screening is valuable; the optimal mode and location for AF screening is unknown. Primary care has been identified as a potential location for AF screening.

Methods: A pilot AF screening programme in primary care in the south of Ireland using a one-lead ECG device, KardiaMobile, was conducted. General practitioners (GPs) were recruited from Cork and Kerry. GPs opportunistically invited patients ≥ 65 years attending for GP visits to undergo AF screening, blood pressure check and identification of smoking status. Descriptive statistics were carried out using STATA 17.0 statistical package.

Outcomes: Anonymised data from 3780 patients, 52 GPs and 34 GP practices was collected, 225 ineligible cases were excluded from the analysis. Among the 3555, 48% (1720) female, 50% (1780) of the population screened were hypertensive and 8% (285) were current smokers. The screening intervention, Kardia Mobile, result 92% (32820) had a normal reading, 3% (101) had possible AF, 4% (124) had an unreadable or unclassified reading and 1% (48) the reading was not recorded. Of the 101 patients who had a possible AF reading, 45% (44) had AF confirmed as per 12 lead ECG.

Discussion: These findings suggest that AF screening in primary care may prove useful for early detection of AF who can be assessed for treatment. A previous AF screening study conducted in the west of Ireland using pulse palpation had an AF incidence rate of 0.8%.

EPIDEMIOLOGY OF HEPATITIS OF UNKNOWN AETIOLOGY IN CHILDREN IN IRELAND

Emer Liddy

HSE Health Protection Surveillance Centre

Co Authors: Niamh Murphy, Rafaela Franca, Emer Fitzpatrick, Annemarie Loretto Broderick, Christine Campbell, Julie-Anne Houlihan, Michael Carr, Ruth Mary McDermott, Keith Ian Quintyne, Suzanne Cotter.

HSE Health Protection Surveillance Centre. Health Protection Surveillance Centre, 25-27 Middle Gardiner Street, Dublin 1. Department of Paediatric GI, Liver and Nutrition, CHI, Crumlin, Dublin Ireland. National Virus Reference Laboratory, University College Dublin,

Abstract

In April 2022, Scotland reported an increase in cases of severe acute hepatitis of unknown aetiology (HUA) to the World Health Organization (WHO)¹. WHO alerted all countries. HPSC cascaded information to clinicians and requested immediate notification of similar cases identified in Ireland. We describe the epidemiology of HUA identified in Ireland, between October 1st 2021 - October 6th 2022. As of 29th September 2022, 555 cases were reported to ECDC by 22 countries in Europe, including 6 deaths.²

An incident management team was convened and agreed on surveillance needs. Cases meeting the following criteria were included: children with HUA (A-E excluded) aged < 17 years at time of onset (since October 1st 2021). A case was defined as “probable” if serum transaminases were >500 IU/L (AST or ALT). Data on exposures, clinical presentation, laboratory results, and outcome were collected using a standardised questionnaire. Data were inputted into an MS Access database and analysed by HPSC.

Between October 1st 2021 and October 6th 2022, 29 probable cases of HUA were identified. Median age was four years (range 0 – 12 years); 52% were female; cases were geographically spread. Dates of onset ranged from week 47 2021, to week 33 2022. Most cases presented between weeks 10 and 27. Of 29 cases, 28 were hospitalised; two underwent liver transplant and one patient died. The most common symptoms at presentation were malaise (92%), pale stools (88%), jaundice (79%), abdominal pain (78%) and vomiting (73%). Adeno-Associated Virus-2 was detected in 64%, SARS-CoV-2 antibodies (58%), adenovirus (52%) and Human Herpes Virus-7 (50%).

This new syndrome, associated with significant morbidity and mortality in young children, warrants continued monitoring and further investigation. Public Health advice is reinforcement of good hygiene practices in childcare settings.

STRATEGIC REVIEW OF THE DELIVERY OF THE ESSENTIAL PUBLIC HEALTH FUNCTIONS
(EPHFs) IN IRELAND: A NOVEL APPROACH TO ASSESSMENT

Geraldine Rita McDarby

The Irish Society of Specialists in Public Health Medicine (ISSPHM)

Co Authors: Saqif Mustafa, Yu Zhang, Louise Hendrick, Catherine M McNicholas

Health Systems Resilience team, WHO. Health Systems Resilience team, World Health Organization. Office of the Chief Medical Officer, Department of Health, Ireland. Office of the Chief Medical Officer, Department of Health, Ireland

Abstract

COVID-19 demonstrated a global lack of resilience in countries across the income spectrum, including Ireland, uncovering critical weaknesses in public health capacities. The essential public health functions (EPHFs) have been recognized as a key strategy for building health system resilience by reducing health system fragmentation, orienting health systems towards population health needs, supporting intersectoral action for health and addressing complex public health problems in a cost effective manner. Given the onerous nature of previous approaches to assessment, the EPHFs are only recently being applied within the context of wider health system strengthening, despite the first list being published in 1998.

As part of the public health reform process initiated by government in January 2022, the Health Systems Resilience team (WHO, HQ) in collaboration with the Department of Health developed a novel approach to the assessment of the EPHFs in a national context. This approach involved a strategic and focused rapid review of the delivery and consideration of the EPHFs as a whole in relation to key thematic areas: policy and planning, inputs and infrastructure, service delivery and integration and coordination. Cross cutting themes of learning systems and monitoring and evaluation were also explored. Informed by literature and document review supplemented by key informant interviews, lessons identified from experience to COVID-19 and current and future health system stressors, strengths and potential areas of improvement to optimize the delivery of EPHFs were identified. These are presented together with the key enablers to ensure effective operationalization of the EPHFs.

EFFICACY, EFFECTIVENESS AND IMMUNOGENICITY OF A SINGLE DOSE OF HPV VACCINE IN 9–14-YEAR-OLDS

Margaret Brennan

The Irish Society of Specialists in Public Health Medicine (ISSPHM).

Co Authors: Cathal O'Broin, Lucy Jessop, Kevin Kelleher, Mary Ward

St Vincent's University Hospital, National Immunisation Advisory. National Immunisation
Office, National Immunisation Advisory Committee. National Immunisation Advisory
Committee. Public Health Area B, National Immunisation Advisory Committee

Abstract

Human papillomaviruses (HPV) are a large group of viruses, commonly sexually transmitted. Persistent HPV infection is causally associated with anogenital and oropharyngeal malignancies, such as cervical cancer. HPV vaccine programs have resulted in remarkable reductions in HPV infection and HPV-related disease however, global coverage is only 15%. In Ireland, two doses of the HPV vaccine are currently recommended for 9-14 years old but evidence suggests that a single dose may provide comparable protection. The work aimed to complete a comprehensive literature review on single-dose HPV vaccination to inform recommendations by the National Immunisation Advisory Committee.

Databases, registries, search engines and reference lists were systematically searched. Unpublished data and international expert advice was sought. Eligibility screening used pre-specified criteria. Risk of bias was assessed with Cochrane Handbook tools. GRADE was used to assess the certainty of evidence. Narrative synthesis was completed.

Thirty-five studies were included: three systematic reviews, two randomised trials and thirty non-randomised studies. Five studies reported efficacy, twenty-one effectiveness and twelve immunogenicity. Three studies reported two outcomes. Evidence certainty was moderate for efficacy but low for effectiveness. One dose of HPV vaccine was reported to provide comparable efficacy to multiple doses. Effectiveness results were mixed due to methodological issues. A single dose of HPV vaccine provokes lower immune responses than multiple doses but higher than natural immunity.

Single-dose HPV vaccination is likely to provide comparable protection, for at least eleven years, as is provided by two doses, in 9-14 years old. This change in national vaccine policy could reduce vaccine inequity, increase uptake and contribute to progress on cervical cancer elimination.

Migrant Health Advocacy in Ireland – Addressing a Crisis

Clodhna Frances Ni Bhuachalla

Department of Public Health Area D (Cork/Kerry)

Co Authors: Margaret Brennan, Chantal Migone, Kenneth Beatty, Niall Conroy, Caitriona Kelly, Geraldine Rita McDarby, Claire Mary Buckley, Douglas Hamilton. Fiona Cianci,

The Irish Society of Specialists in Public Health Medicine (ISSPHM).

Abstract

Migrant health in Ireland is a key advocacy focus for the Irish Society of Specialists in Public Health Medicine (ISSPHM). While significant cross-sectoral efforts have been made to address the unprecedented influx of displaced people into Ireland, large gaps remain in the response. The aim of this paper is to describe the migrant health advocacy and related activities of the ISSPHM.

A migrant health advocacy working group, comprising society members with an interest and/or expertise in the area, was convened. A migrant health statement was developed and agreed as basis for all further advocacy work.

The society's migrant health statement is underpinned by a one-migrant approach to meeting the health and social care needs of all vulnerable migrants in Ireland. Key focus areas include:

- a national migrant health programme, with clear governance, aligned with the World Health Organization's five pillars of action for migrant health
- an all-of-government response
- improved cross-sectoral coordination and communications
- vastly improved primary care and mental health services access
- fit-for-purpose accommodation to reduce risk of infectious disease outbreaks
- programmes for health needs assessment, infectious disease testing and vaccination
- health information systems and health intelligence processes to inform population level planning.

Related media work outputs to date include articles in medical print media, letters in non-medical print media, national broadcaster primetime radio interview and a publication in a peer reviewed journal.

The ISSPHM provides a valuable advocacy voice for vulnerable migrants. A one migrant approach, as advocated by the ISSPHM, is fundamental to ensuring that the needs of all refugees and international protection applicants are equitably served, and to promoting integration into Irish society.

A novel interagency sexual health promotion initiative for Ukrainian refugees in Cork and Kerry

Clíodhna Frances Ni Bhuachalla

Department of Public Health Area D (Cork/Kerry)

Co Authors: Olga Jackson, Catherine Darcy Walsh, Michael Hanrahan, Katriona Purcell,
Martin Davoren, Peter Barrett

Department of Public Health Area D (Cork/Kerry). The Sexual Health Centre Cork, The Sexual Health Centre Cork.

Abstract

Over 51,000 Ukrainian refugees have arrived in Ireland in 2022. This group has a higher burden of some infectious diseases. A regional sexual health promotion initiative for Ukrainian refugees was developed between the Department of Public Health (Cork & Kerry) and the Sexual Health Centre Cork to provide tailored information and support to this cohort, and to facilitate rapid HIV and STI testing.

A mobile sexual health unit, the Drugs, Alcohol and Sexual Health (DASH) van, was utilised to provide outreach sexual health promotion and opt-in HIV testing at priority accommodation centres for Ukrainian refugees in Cork/Kerry. Prior promotion occurred via the accommodation centres' Whatsapp/Telegram groups. Sexual health information leaflets were translated into Ukrainian and Russian and circulated digitally and in person. Sexual health products, comprising condoms, lubricant, pregnancy tests, period products and rapid HIV tests, were distributed.

Of eight sites visited, 630 Ukrainian refugees have directly presented. To date, 1269 sexual health promotion leaflets (covering a range of sexual health topics), 3636 condoms and 1206 period products have been distributed. One hundred and twenty rapid HIV tests have been conducted; all were non-reactive and one service user with known HIV presented for assistance.

This novel outreach initiative suggests that there is a collective want for engagement with, and an unmet need for, sexual health promotion services, including HIV testing, amongst Ukrainian refugees.

THE IMPACT OF THE NATIONAL CHRONIC DISEASE MANAGEMENT PROGRAMME ON SYSTOLIC BLOOD PRESSURE IN PATIENTS AGED 65+ ATTENDING PRIMARY CARE

Celia O'Hare

HSE

Co Authors: Sarah O'Brien, Alice Kasemiire, Joe Gallagher, Ricardo Segurado, Orlaith
Josephine O'Reilly

NACGL Chronic Disease, UCD CSTAR Centre for Support and Training in Analysis and
Research, Irish College of General Practitioners.

Abstract

Background

Improving the quality of care for patients with chronic disease (CD) is a priority of health systems around the world. Following reform of the General Practitioner contract 2019, the Chronic Disease Management (CDM) Programme was introduced into primary care in Ireland in January 2020. We hypothesized that change in Systolic Blood Pressure (SBP) over time would be positively impacted by improved CD care in primary care patients attending the CDM.

Methods

Data was extracted from the Chronic Disease Data Repository from 01.01.2020-30.06.2022 inclusive. Multilevel models were used to model change in mean population SBP using individual level data from 216,755 patients aged 65+ who had attended for up to six reviews in the first 2.5 years of the CDM programme. Models were adjusted for age, sex and multi-morbidity.

Results

In patients attending the CDM the mean age was 76.5(SD 6.5) years. Mean SBP at first observation was 137.5mmHg (SD 17.3) with differences evident according to sex (women 138.1 (SD17.5) mmHg vs. men 137.0(SD17.0) mmHg; $p<0.001$). In age and sex-adjusted models mean estimated population SBP tended to decrease over follow-up with an initial linear decline (-0.57 mmHg/year (95% CI -0.78;-0.36); $p<0.001$) but subsequent slowing in the rate of decrease over 2.5 years (0.14 mmHg/year² (95% CI 0.02; 0.26); $p=0.02$) non-linear change). Findings were similar following adjustment for multi-morbidity.

Conclusion

The findings of this analysis of repeated measures of SBP in patients attending the CDM over the initial 2.5 years suggest a positive impact on this key intermediate outcome. Even small reductions in SBP at population-level may have population health benefits. The benefits of

the CDM programme should be extended to a wider population and to cardiovascular conditions not yet reimbursed.

RETROSPECTIVE ANALYSIS OF HTA OUTCOMES FOR ANTIMICROBIAL AGENTS IN IRELAND

Aine Varley

National Centre for Pharmacoeconomics, Ireland

Co Authors: Laura McCullagh, Michael Barry

National Centre for Pharmacoeconomics, Ireland. National Centre for Pharmacoeconomics, Ireland

Abstract

Novel antimicrobial agents (AMAs) include drugs which are key to tackling the important public health problem of antimicrobial resistance. In Ireland, like other jurisdictions, health technology assessment (HTA) is used to inform decisions on drug reimbursement. Internationally, it's been hypothesized that the HTA process may contribute to the disincentivisation of the delivery of novel AMAs. This research reports on the HTA process for AMAs in Ireland, and considers how the outcomes may contribute to the availability of these drugs.

A retrospective analysis of all drugs which underwent HTA at the National Centre for Pharmacoeconomics Ireland between 2012 – 2021 was conducted. For each drug, outcomes including recommendations received at key stages in the HTA pathway were recorded. The primary endpoint was the proportion of drugs receiving a positive reimbursement recommendation following Rapid Review (indicates that the HTA agency could recommend reimbursement to the decision-maker, without the requirement for further evaluation in the form of a full HTA). Outcomes for AMAs and non-AMAs were compared.

Of the Rapid Reviews evaluated, 48/524 (9.2%) were for AMAs. As compared to non-AMAs, AMAs were significantly more likely to receive a positive reimbursement recommendation following Rapid Review (18.1% vs. 39.6%, respectively; $\chi^2=12.5981$, $p=0.0003$).

In Ireland, AMAs are significantly more likely than non-AMAs to receive positive reimbursement recommendations at an early stage in the HTA pathway, avoiding the need for a full HTA. These findings do not support the hypothesis that the HTA evaluation process per se disincentivises delivery of novel AMAs. Future research may benefit from adopting a broader scope when considering the enablers and barriers to the availability of these drugs.

HEALTHCARE DECISION-MAKING IN THE TIME OF COVID-19: AN EXAMINATION OF DECISION CRITERIA FOR THE EQUITABLE ALLOCATION OF COVID-19 VACCINES GLOBALLY

Rebecca Marshall

London School of Hygiene & Tropical Medicine

Abstract

Unprecedented levels of global cooperation led to the development of vaccines against COVID-19 in record time. The COVID-19 Vaccine Global Access (COVAX) Facility was launched early in the pandemic with the aim of providing equal access for all to vaccines. Unfortunately, in the intervening years, global vaccine inequity has become a stark reality. The aim of this review was to explore the decision-making criteria that should be used to guide the fair global allocation of COVID-19 vaccines.

A systematic scoping review of the literature was conducted across four databases for papers published between January 2019 – July 2022. This was supplemented with a search of the grey literature. Data relating to criteria for vaccine allocation among countries was extracted from relevant literature based on pre-defined eligibility criteria. Decision criteria were then mapped to the WHO-INTEGRATE Evidence-to-Decision (EtD) framework, and the frequency of each assessed.

After removal of duplicates, 1,128 articles were identified, of which 23 met the eligibility criteria and were included in the review. 108 criteria decision aspects were extracted in total and organised into three category levels. The most frequently reported criteria were under the domains of health equity, human rights & sociocultural acceptability, and feasibility & health system considerations. 4 of the included papers proposed detailed alternative global allocation frameworks. There was a lack of consensus over what measurements should be used to populate the various criteria for decision-making.

Future lessons can be learned from this review to ensure a fairer global allocation mechanism for vaccines and other key health technologies. These include the importance of a transparent decision-making process, consideration to those at particular risk, and the need to account for vaccine nationalism.

A SYSTEMATIC REVIEW OF STUDIES WHICH ASSESS WHETHER MATERNAL VACCINATION
AGAINST SARS-CoV-2 IN PREGNANCY LEADS TO IMMUNITY IN THE NEONATE

Aoife O'Connell

Department of Public Health Midwest Area E

Abstract

This systematic review aimed to summarize the evidence from studies which assessed whether maternal immunity is transferred to the neonate following maternal vaccination against SARS-CoV-2 in pregnancy. It also aimed to assess if there was an optimal trimester of pregnancy for women to be vaccinated to maximise antibody transfer to the neonate. This knowledge may reduce vaccine hesitancy among pregnant women. Also, neonates are at risk of more severe Covid-19 infection, compared to older children, and those under six months are not eligible for vaccination.

A systematic search was carried out of PubMed, Embase, Web of Science and CINAHL. PRISMA guidelines were followed. Reference lists of included studies were hand searched. EndNote reference management software was used. Data abstraction was carried out using a detailed data extraction form. Quality of the included studies was assessed using either the Joanna Briggs Institute checklist for case series or the Newcastle Ottawa Scale for cohort studies. A narrative review of included studies was performed. Thirteen studies were found to meet the inclusion and exclusion criteria. All studies found that maternal vaccination in pregnancy led to detectable immunoglobulin in neonatal cord blood at birth. Highest antibody levels in neonatal cord blood found with vaccination or booster early in the third trimester.

This review concluded that primary vaccination should be performed as early as possible in pregnancy. Optimal timing for booster vaccination appears to be late in the second trimester or early in the third trimester to convey maximal passive immunity to the neonate. The studies included in this systematic review are small, and larger scale data would be useful to validate these early findings. A meta-analysis was not feasible due to the heterogeneity of the results.

CASE REPORT OF A SALMONELLA HESSAREK CASE IN THE SOUTH-EAST INVOLVING DUCK EGGS

Lili Peterson

Department of Public Health Area C

Abstract

Salmonella mostly causes a self-limiting enterocolitis, however, it can develop into a serious bacteraemia in 6% of those affected. Food borne transmission with animal products or those contaminated with animal faeces is a common source of infection, with eggs is the most common culprit in the EU.

Salmonella Hessarek is a rare serotype of Salmonella Enterica, which has caused three outbreaks in Australia, all relating to eggs. Little is known so far about Hessarek, apart from that it shows a high degree of eggshell penetration.

A case of Salmonella in the South-East was of a hospitalised gentleman was brought to the department's attention. Enhanced surveillance was completed, and Environmental Health Office referral made due to the consumption of undercooked duck egg. Salmonella Enteritidis was subsequently discovered at the flock in question. The serotype of the patient, however, was Hessarek, this prompted further investigation of the flock, subsequently Hessarek was also discovered. This led to a recall of all eggs from said flock and press release on safe consumption and storage of duck eggs.

This case showed the importance of the multidisciplinary team working together to complete said tasks in a timely manner, all well preserving the anonymity of the patient and the flock. Little at present is known about Salmonella Hessarek. However, there is evidence that it demonstrates high degree of penetration to eggs shells. We also know that duck eggs in particular are susceptible to contamination with Salmonella. With antibiotic-resistant Salmonella strains becoming an increasing public health concern, care must be taken to act quickly to any potential threat to health.

Child and Adolescent Patterns of Commuting to School in Ireland

Claire Power

UCD School of Public Health, Physiotherapy and Sports Science, University College Dublin,
Ireland

Co Author: Patricia Fitzpatrick

School of Public Health, Physiotherapy & Sports Science, University College Dublin, Belfield,
Ireland.

Abstract

The WHO stipulate children and adolescents should accumulate 60 minutes of physical activity (PA) daily. Globally 75% of this cohort do not meet PA guidelines. Research highlights active travel to school (ATS) as a convenient way to integrate PA into daily life with a documented health benefit accruing. Understanding factors associated with ATS is essential to inform a public health approach to increase ATS. This study described patterns of commuting to school and determined factors associated with ATS.

Children's Sport Participation & Physical Activity Study (CSPPA) 2018 data was used. This was an all island (Northern and Republic of Ireland (ROI)) cross-sectional study of 1,548 primary and 5,102 secondary students. Logistic regression analysis was performed to determine factors independently associated with ATS.

Most common commute to school methods were; private car for primary (57%) and public transport for secondary (39%) students. Completion of 60 minutes PA the week prior to survey was 19.5% for primary, 12.6% for secondary students. Students of ROI nationality (OR1.09 95%CI1.02-1.16), meeting PA guidelines (OR1.26 95%CI1.08-1.46), attending a ROI school (OR2.27 95%CI2.02-2.57), attending a non-delivering equality of opportunity school (non-DEIS) (OR2.47 95%CI1.87-3.24) and attending an urban school (OR3.96 95%CI3.41-4.59) were each independently statistically significantly associated with greater ATS. Students living in a family with a car (OR0.27 95%CI0.19-0.39), attending secondary school (OR0.69 95%CI0.62-0.78), attending a small (<33rd percentile) sized school (OR0.68 95%CI0.60-0.77) or living >5km from school (OR0.22 95%CI0.2-0.24) were each significantly negatively associated with ATS.

ATS is a convenient method to increase childhood and adolescence PA and health. Further work is required to grow ATS participation in rural and DEIS schools.

PREVALENCE OF URINARY INCONTINENCE IN OLDER ADULTS IN A COMMUNITY SETTING

Amruta Varghese

UCD School of Public Health, Physiotherapy and Sports Science, University College Dublin

UCD School of Public Health

Co Author: Patricia Fitzpatrick

School of Public Health, Physiotherapy & Sports Science, University College Dublin, Belfield,
Ireland

Abstract

Urinary incontinence (UI) has a significant impact on quality of life. There are no recent Irish studies assessing UI prevalence in an extra-hospital setting. This study aims to determine the prevalence of urinary incontinence among community-dwelling older Irish adults and identify its association with socio-demographical and lifestyle factors.

This cross-sectional study was conducted on community-dwelling older Irish adults ≥ 50 years using the TILDA wave four datasets. Key UI variables were self-reported occurrence (yes/no) and severity (frequency/activity limits) of UI over the preceding 12 months. Following univariate analysis, logistic regression was performed to determine the factors independently associated with UI.

The prevalence rate of UI was 15.7%, with 77.4 % of those with UI reporting its occurrence more than once a month. UI was considerably higher in females than in males (20.2% vs 10.1%; $p < 0.001$). UI prevalence increased significantly with age, rising from 11.7% in those aged 50-59 to 24.5% in those aged ≥ 80 years ($p < 0.001$). Participants with higher educational status had a lower UI rate (15%) than those with lower ($p = 0.012$). Multivariate logistic regression illustrated that after adjusting for age and gender; increasing BMI, presence of comorbidity, and polypharmacy (\geq five medications) were each independently associated with UI.

Urinary incontinence remains a relatively silent but highly prevalent condition in the community despite more public awareness and medical education about the condition. Polypharmacy in older adults remains a risk factor. Medication use, concurrent illnesses and functional impairment in older patients must be carefully evaluated and managed in addition to treating UI.

SMOKING AS A RISK FACTOR FOR INCREASED USE OF MEDICATION, HEALTHCARE
UTILISATION AND HOSPITALISATION; TILDA WAVES 3-4

Anand Pisharody

School of Public Health, Physiotherapy & Sports Science, University College Dublin, Belfield,
Ireland

Co Author: Patricia Fitzpatrick

School of Public Health, Physiotherapy & Sports Science, University College Dublin, Belfield,
Ireland

Abstract

In Ireland, smoking is the leading cause of preventable death. There is considerable morbidity with the HSE estimating an average of 10 quality adjusted years of life lost. This results in higher medical costs. Tobacco free Ireland aims to reduce smoking prevalence to <5% by 2025. Recently published clinical guidelines for tobacco control stress the need for smoking cessation in hospitals. The aim of this study was to investigate the relationship between smoking and hospitalisation, health service utilisation and medications use.

TILDA (The Irish Longitudinal Study on Ageing) wave 3 and wave 4 datasets were used; a cohort study approach was undertaken with 5,564 participants in both wave 3 and 4. Following univariate analysis, logistic regression analysis was performed to determine the health service usage outcomes associated with smoking.

On univariate analysis, primary/no education ($p < 0.001$) and lower age group (<53 years) were significantly associated with increased smoking. On logistic regression analysis, after adjusting for demographic variables, smokers had a reduced likelihood of attending ≥ 1 GP appointments over the past 12 months than non/ex-smokers (adjusted OR 0.65, 95% CI 0.42-0.72). Hospitalisations during the same period were found to have no significant association with smoking ($p = 0.490$). Smoking was also shown to cause a reduced likelihood of having ≥ 1 regular medications (adjusted OR 0.69, 95% CI 0.57-0.85).

The results are suggestive that smokers tend to avoid visiting the GP which could indicate that smokers are unconcerned about their health or do not wish to discuss smoking. This aversion to seeking medical help in the early stages of illness may lead to a worse prognosis and, as a result, higher medical costs. Further research is required to investigate the dose-effect relationship of smoking with health service utilisation in Ireland.

HOW AND WHY DO FINANCIAL INCENTIVES CONTRIBUTE TO HELPING PEOPLE STOP SMOKING? A REALIST REVIEW

Rikke Siersbaek

Centre for Health Policy and Management

Co Authors: Sarah Parker, Paul Kavanagh, John Ford, Sara Burke

Centre for Health Policy and Management. National Health Intelligence, Strategic Planning
and Transformation, Jervis House, Dublin 1. Institute of Public Health. Centre for Health
Policy and Management

Abstract

Smoking still kills almost 100 people each week in Ireland, with the greatest burden in poorest groups. Quitting saves lives and prevents disease. Innovation to scale up quitting is urgently needed, especially reaching groups left behind. Research evidence from a recent Cochrane review shows that financial incentives effectively help people quit. However, less is known about how, why, for whom and to what extent this complex intervention works, essential questions for effective implementation design. We report a realist review of published literature to inform planning of the implementation of financial incentives in stop smoking services.

Realist review is an evidence synthesis approach to uncover causal patterns in complex open systems through interpretive, theory-driven analysis of qualitative, quantitative and mixed-methods data. It explains how and why context can influence outcomes enabling understanding of that factors shape experience of, engagement with, and outcomes of complex interventions. Five databases were searched and 22 studies were included. Data were extracted and analysed using a realist procedure.

Overall, financial incentives work by motivating people through their inherent financial value and through the utility they offer in a person's life. In particular, people who have limited resources, such as those living in deprived areas, are motivated by financial incentives because they provide needed monetary resources, tangible rewards for their efforts leading to feelings of encouragement, increased confidence, and self-esteem.

These findings are informing financial incentive implementation planning by the HSE Tobacco Free Ireland Programme. The potential for realist approach demonstrated in this study offers to augment the public health toolkit for planning and evaluating increasingly complex problems and interventions in Ireland.

The Impact of COVID-19 in Irish Nursing Homes: An assessment of variables associated with performance during the first wave of the pandemic

John Loughrey

UCD, School of Public Health, Physiotherapy and Sports Science

Co Authors: Mary Bernadette Codd, Patrick Wall

University College Dublin, UCD School of Public Health, Physiotherapy and Sports Science

Abstract

The COVID-19 pandemic has had a devastating impact globally, particularly on long-term care facilities (LTCF), who house elderly and vulnerable populations. In Ireland, LTCF residents were badly affected in the first wave, accounting for 56% of the country's COVID-19 deaths, with 3-5% of all LTCF residents in the country succumbing to the disease in this timeframe. Continued investigation of reasons for this catastrophe is vital.

The aim of this research was to establish whether risk factors for high LTCF mortality established elsewhere were significantly associated with Irish LTCF performance in the first wave. Specifically, cumulative county incidence rate, facility size, occupancy rates, ownership and compliance with health inspection regulations were investigated.

The main outcome considered was deaths per 100 beds. Data on crude mortality were available for 580 LTCFs up to 28th May 2020. Estimates of occupancy and compliance with regulations were averaged for these LTCFs from a novel dataset of 1130 HIQA reports. Focused geographic, temporal and correlation analyses looked at the relationship between deaths and studied variables. Bivariate and multivariate regression analyses were carried out to predict LTCF performance.

The most significant predictor for COVID-19 LTCF deaths resulting from this research was cumulative COVID-19 incidence in a county followed by facility size, in concordance with international literature. Occupancy rates and ownership factors were not found to have significance. Compliance with HIQA regulations showed borderline significant association with worse performance. In conclusion, to protect LTCF residents in Ireland both now and for potential future pandemics, attention should be paid to monitoring and suppressing local incidence rates, as well as moving towards the construction of smaller facilities with more private rooms.

"QUARANTEENS" - LIFE AFTER LOCKDOWN: THE OVERALL HEALTH AND WELLBEING OF
12/13 YEAR OLDS IN IRELAND DURING THE COVID-19 PANDEMIC

Fiona McGuire

SpR Public Health Department of Public Health, Area B - Midlands.

Co Authors: Clare Reynolds, Mary Bernadette Codd

Assistant Professor, UCD School of Public Health, Physiotherapy and Sports Science.
University College Dublin.

Abstract

Background

On 12th March, 2020, to interrupt the transmission of the SARS-CoV-2 virus, schools in Ireland closed. The unprecedented global spread of the virus over the months that followed led to the COVID-19 pandemic being dubbed the “biggest public health crisis since the Second World War” (Mallah et al., 2021). In Ireland, schools were closed for 141 days (Chzhen, 2022), dramatically altering the day to day lives of children in Ireland. This research aimed to evaluate the overall wellbeing of schoolchildren in Ireland and capture the prevalence and factors contributing to poor mental health.

Methods

A cross-sectional study was performed based on data from the Growing Up in Ireland COVID-19 web survey of the '08 Infant cohort. Mental Health Inventory–5 scores were used to assess children at risk of mental health disorders. Logistic regression examined associations between various demographic and psychosocial factors and risk of mental health disorders.

Results

This study included 2,867 primary caregiver- child dyads. Almost 25% of 12/13-year-olds were at risk of mental health disorders (MHDs). An adjusted logistic regression model found associations between being at higher risk of MHDs and factors such as reduced physical activity levels (OR 1.35, 95% CI 1.10-1.66), spending less time outdoors (OR 1.48, 95% CI 1.18-1.85), increased screen-time (OR 1.35, 95% CI 1.09-1.67) and increased arguments with PCGs (OR 3.44, 95% CI 2.78-4.27). Having a trusted adult confidante reduced the risk of MHD (OR 0.25, 95% CI 0.14-0.45).

Conclusion

The prevalence of 12/13-year olds at elevated risk of MHD was high, indicating an urgent need for enhancement of child and adolescent mental health services in Ireland. Physical activity, time outdoors and supportive relationships with primary caregivers were positively associated with reduced MHD risk.

EXPLORING THE PREVALENCE OF AND FACTORS ASSOCIATED WITH SELF-REPORTED HEPATITIS A AND B VACCINATION AMONG GBMSM IN IRELAND

Philippa White

Department of Public Health HSE-South

Co Authors: Kate O'Donnell, Aline Brennan, Martin Davoren, Fiona Lyons, Mick Quinlan, Bill Foley, Caroline Hurley, Derval Igoe, Peter Barrett,

Health Protection Surveillance Centre, Department of Public Health, HSE-South, The Sexual Health Centre. HSE Sexual Health & Crisis Pregnancy Programme. Gay Health Network. Department of Public Health Area D (Cork/Kerry)

Abstract

Gay, bisexual and other men who have sex with men (gbMSM) have a higher risk of acquiring hepatitis A and B viruses (HAV and HBV) compared with the general population and are recommended for vaccination against both in Ireland. This study aimed to determine the prevalence of self-reported HAV and HBV infection and vaccination among gbMSM in Ireland, and explore factors associated with vaccination.

Irish data from the European MSM Internet Survey 2017 (EMIS-2017) were analysed to measure the prevalence of self-reported HAV and HBV infection and vaccination. Multivariable logistic regression was used to explore the associations between sociodemographic, healthcare-related and behavioural factors and self-reported vaccination status. Men living with HIV were analysed separately; due to their high level of planned, formal engagement with health services, their inclusion in the primary analyses may have biased results.

There were 2,083 EMIS-2017 respondents in Ireland. Among HIV-negative men, 4.6% and 4.4% reported previous HAV and HBV infection, respectively; 51% and 57% reported receiving ≥ 1 HAV and HBV vaccine dose, respectively. Men had lower odds of self-reported HAV vaccination if they lived outside of Dublin (aOR 0.61, 95%CI: 0.48–0.78), had no third level education (aOR 0.65, 95%CI: 0.45–0.92), were not tested for HIV (aOR 0.39, 95%CI: 0.31–0.50) or diagnosed with an STI in the previous year (aOR 0.42, 95%CI: 0.28–0.63), and had never tried to obtain pre-exposure prophylaxis for HIV (aOR 0.60, 95%CI: 0.38–0.96). Similar associations were observed for self-reported HBV vaccination

Self-reported vaccination against HAV and HBV among gbMSM in Ireland is insufficiently high to protect against future HAV and HBV infections and outbreaks. Efforts to promote vaccination should focus on gbMSM living outside Dublin and those not engaged with health services.

EFFECTS OF THE COVID-19 PANDEMIC ON PREHOSPITAL EMERGENCY CARE FOR ADULTS WITH STROKE/TRANSIENT ISCHAEMIC ATTACK: SYSTEMATIC REVIEW AND META-ANALYSIS

Edel Burton

School of Public Health, University College Cork, Cork City, Cork, Ireland

Co Authors: Johnny Aladkhen, Cathal O'Donnell, Siobhan Masterson, Áine Merwick, Vera J.C. McCarthy, Patricia Mary Clare Kearney, Claire Buckley

School of Public Health, University College Cork, Cork City, Ireland. National Ambulance Service, Health Service Executive, Dublin, Ireland. Department of Neurology, Cork University Hospital, Cork City, Cork, Ireland. School of Nursing and Midwifery, University College Cork, Cork City, Ireland.

Abstract

The COVID-19 pandemic impacted on health service provision worldwide, including care for acute time sensitive conditions, like stroke and transient ischaemic attack (TIA). Thus, the aim of this study was to conduct a systematic review and meta-analysis to investigate the impact of the COVID-19 pandemic on prehospital emergency care for stroke/TIA.

Following a published study protocol, a systematic search of databases was conducted up to 31st May 2022. Peer-reviewed quantitative studies comparing prehospital emergency care for adults with suspected stroke/TIA before and during the COVID-19 pandemic were considered for inclusion. The methodological quality of the included studies was assessed using the appropriate Joanna Briggs Institute (JBI) tool. Overall pooled estimates of ambulance times (activation, response, patient care time) and stroke/TIA emergency call volume were calculated. Subgroup and sensitivity analyses included location and stroke/TIA diagnosis.

Of 4083 studies identified, 56 unique articles met the inclusion criteria. Early data from 8/12 studies reporting ambulance times, suggests that patient care time increased. Furthermore, emergency call volume for stroke/TIA decreased during the COVID-19 pandemic, according to 43/56 studies that reported this outcome. Terminology for ambulance time intervals differed between studies. The majority of studies reported time from call to hospital arrival, whereas the minority of studies reported activation time.

Conflicting evidence exists on the impact of the COVID-19 pandemic on ambulance times and emergency call volume for stroke/TIA. Thus, this review synthesised available evidence on the varied effects across different countries, healthcare systems and ambulance time terminology. Review findings may inform our understanding of healthcare system resilience in response to crises on a broader level.

PROBLEMATIC OPIOID USE IN IRELAND, 2015 – 2019

Michael Hanrahan

Department of Public Health HSE South, St. Finbarr's Hospital, Cork

Co Authors: Seán Millar, Karl Philips, Thomas Reed, Deirdre Mongan, Ivan Joseph Perry

School of Public Health, University College Cork, Cork. School of Biological, Earth and Environmental Sciences, University College Cork, Cork, Ireland.

Abstract

Problematic drug use is defined by the European Monitoring Centre for Drugs and Drug Addiction as “recurrent drug use that is causing actual harm (negative consequences, including dependence, but also other health, psychological or social problems) to the person or is placing the person at a high probability/risk of suffering such harms”.

This study used a four source capture-recapture method to estimate the extent of problematic opioid use in Ireland for the period 2015–2019 and updates a similar study that was conducted for the period 2011–2014. Three of the four data sources used for the analysis were derived from opioid substitution treatment records (i.e. the Central Treatment List which was split into clinics, general practitioners and prisons) and the fourth data source was from the Irish Probation Service.

In total, there were an estimated 19,875 problematic opioid users in Ireland in 2019 (95% CI: 19,522 – 21,608) – prevalence rate 46.68 per 1,000 population (95% CI: 6.57 – 7.27). The majority were male (72.3%) and in the 35–64-year-old age group (72.9%). There were an estimated 11,729 problematic opioid users (95% CI: 11,298–12,944) in Co. Dublin in 2019, with a prevalence rate more than four times higher there than in the rest of Ireland (12.72 per 1,000 population (95% CI: 12.25–14.03) versus 3.97 per 1,000 population (95% CI: 3.84–4.47)).

The findings in this study will add to policy-makers', service providers', and the general public's understanding of the problematic drug use phenomenon in Ireland.

ESTIMATING THE PREVALENCE OF HIV AMONG UKRAINIAN REFUGEES IN IRELAND

Michael Hanrahan

Department of Public Health HSE South, St. Finbarr's Hospital, Cork

Co Author: Peter Barrett

Department of Public Health Area D (Cork/Kerry)

Abstract

The Russian invasion in Ukraine has forced millions of people to flee their homes and seek refuge throughout Europe. According to the 2019 Global Burden of Disease (GBD) survey, the estimated prevalence of HIV in Ukraine was 0.63% (0.48-0.79%). The aim of this study was to estimate the number of people living with human immunodeficiency virus (HIV) among Ukrainian refugees living in Ireland.

HIV prevalence data from the 2019 GBD survey were applied to the known number of Ukrainian refugees living in Ireland based on arrivals data from the Central Statistics Office up to 25th September 2022. Additionally, the 2021 UNAIDS data was used to estimate the number of Ukrainian refugees living in Ireland with HIV who know their status, the number of people living with HIV who were on antiretroviral therapy (ART) and the number of people living with HIV who had suppressed viral loads before the war in Ukraine began.

The estimated number of people living with HIV from Ukraine in Ireland is 320.3 people (202.4 – 512.0). Of these, 126.0 (81.4 – 195.1) are likely to be male and 194.3 (121.0 – 316.9) are likely to be female. The greatest numbers of expected cases are among those aged 30-44 years old. It is estimated that 75% [n = 240.2 (151.8 – 384.0)] people living with HIV know their status, and that 62% [n = 198.6 (125.5 – 317.4)] of people living with HIV were on ART and 58% [n = 185.8 (117.4 – 297.0)] had suppressed viral loads before the war began.

It is likely that additional cases of HIV have yet to be identified and linked into healthcare services. This study has estimated the number of cases that could be expected in Ireland in order to aid health care service planning.

HEPCARE PLUS: ENHANCING PRIMARY CARE IDENTIFICATION AND TREATMENT OF HEPATITIS C VIRUS IN HIGH-RISK INDIVIDUALS

Tessa O' Gorman

Department of Public Health - Area A, Infectious Diseases Department MMUH & CEPHR,
UCD, Dublin.

Co Authors: James Woo, John S Lambert, Tina McHugh, Gordana Avramovic, John Broughan,
Raffaele Federico, Jeremy Farrell, Bernard West, Brendan O' Kelly, Walter Cullen, Eileen O
Connor,

Infectious Disease Department, MMUH, Dublin.

Abstract

Hepatitis C Virus (HCV) disproportionately affects people who inject drugs, migrants, prisoners and the homeless. An integrated, peer-led model of care involving primary and secondary care is required to enhance the identification and treatment of HCV in these marginalised groups.

HepCare Plus builds on the network and achievements of HepCare Europe (a co-funded European Commission/Health Service Executive (HSE) project). It further identifies those not accessing care and facilitates prompt assessment and treatment of those diagnosed with HCV, with the aid of a peer support worker (PSW) and a community HCV nurse specialist. The PSW and community HCV nurse identified community services where individuals with HCV risk factors frequent (homeless/harm reduction services, general practices). These individuals were screened for HCV and if required offered a direct pathway to treatment with peer support in the Mater Misericordiae University Hospital (MMUH), Dublin.

From August 2019 to December 2021, of 109 individuals identified and assessed for HCV treatment under the remit of HepCare Plus, 100 (92%) commenced HCV treatment. Despite interruptions to treatment figures (COVID-19 pandemic, HSE cyberattack) there was a high-level of treatment completion with PSW engagement (98%). 100 (36.6%) individuals who initiated treatment for HCV in the MMUH availed of HepCare Plus instigated peer support. Eighty (73%) individuals were previously aware of a positive HCV status, highlighting the ongoing need to address barriers preventing marginalised groups from engaging with care.

HepCare Plus reiterates the defining role of peer-led community interventions in HCV treatment engagement and the need for continuous open-ended care. It provides an equitable and sustainable framework to meaningfully combat HCV and achieve the United Nations Sustainable Development Goal of HCV elimination.

Big tobacco's dirty tricks: a survey of attitudes towards tobacco industry tactics and reader response to a casebook on the subject

John Gannon

On Call Africa, Livingstone, Zambia

Co Authors: Katharina Bach, Biljana Kilibard, Yousef Khader, Uzoamaka Okwor, Sarah Forberger, Yael Bar-Zeev

World Federation of Public Health Associations, Geneva, Switzerland

Abstract

Tobacco companies have for decades undermined tobacco control measures through various means. This working group created a casebook outlining seven key tactics used by the industry to promote their products and influence public and political opinion.

Articles were researched and written by group members from public health backgrounds. The casebook was distributed through member networks and published on the World Federation of Public Health Associations website and social media. Readers were surveyed evaluating their feedback on the casebook and their attitudes towards tobacco industry tactics. Questions were designed in consultation with tobacco control experts.

There were 30 survey respondents from 15 countries (response rate unknown). Of these, 17 (57%) worked in tobacco control. Asked how much the casebook improved their understanding of industry tactics, 11 (37%) said 'significantly' and six (20%) said 'very much'. There were 19 (63%) 'very likely' and ten (33%) 'likely' to recommend the casebook to colleagues.

Likert scale results included:

- 18 (60%) Strongly Agree: Political donations by tobacco companies should be universally banned.
- 18 (60%) Strongly Agree: Electronic alternatives (e.g. vapes) should be regulated as strictly as cigarettes.
- 15 (50%) Strongly Agree: Governments should sue tobacco companies for health care costs caused by their products.
- 23 (77%) Strongly Disagree: Retailers should be allowed to accept payments from tobacco companies to incentivise product sales.
- 16 (53%) Strongly Disagree: I am confident that politicians in my country are not influenced by tobacco companies.

Our casebook was found to be informative by readers with tobacco control expertise from a global perspective, with encouraging feedback. Opinions generally supported stricter governmental regulations to impede tobacco corporation activities.

Development of educational and training resources to improve antimicrobial stewardship in
a Zambian rural health post

John Gannon

On Call Africa, Livingstone, Zambia

Co Authors: Kerry Greenan, Eleanor Richards, Tom Neale, Fiona Neale, Olivia Duffy, Hannah
Raval

On Call Africa, Livingstone, Zambia.

Abstract

Overprescribing of antibiotics in rural low-resource healthcare settings in Sub-Saharan Africa is common. Volunteers with a non-governmental organisation (NGO) in Zambia's Southern Province created and delivered interventions in partnership with local healthcare staff, to aim for sustainable improvement in antimicrobial stewardship in a rural health post serving 25,000 people.

Antibiotic usage in clinics was measured three times over 16 months (April 2021, March 2022, August 2022). Chart reviews evaluated compliance with national guidelines in decision to prescribe and antibiotic choice. Data collection was approved by the Zambian Ministry of Health. After Audit 1, mentoring sessions were carried out by volunteers over five weeks for staff and patients, including immediate feedback during consultations. After Audit 2, educational resources were produced including infographics on antibiotic resistance (translated to local language Tonga) and a summary of the Zambian Standard Treatment Guidelines. Staff were trained in a free digital stock management system using a tablet device, aiming to improve medication supply.

A total of 340 consultations were reviewed over the three audits (240, 50 & 50). Ratio of overprescription (antibiotics prescribed: indicated) declined from 212/59 (3.59:1) to 33/11 (3:1) to 25/9 (2.78:1). Correct antibiotic choice varied from 14/59 (25.9%) to 1/11 (9%) to 3/9 (33%).

There was a steady decline in antibiotic overuse following mentoring and educational interventions. Incorrect choice of antibiotic was often due to lack of medication availability. A key challenge will be continued improvement in antibiotic stewardship standards and reducing stockouts of medicines in this Zambian health post without ongoing oversight from the NGO. Findings can inform implementation of similar projects in other rural low-resource healthcare settings.

For better pandemic control now and into the future

Claire Buckley

School of Public Health, University college Cork, Health Service Executive, Cork

Co Authors: Geraldine Rita McDarby, Laura Heavy, Patricia Kearney, Ina Kelly, Fiona Cianci,
Douglas Hamilton

Irish Society of Specialists in Public Health Medicine (ISSPHM), Department of Public Health,
HSE Area D. Department of Public Health, HSE Midlands. Department of Public Health, Area
B.

Abstract

The COVID-19 pandemic exposed weaknesses in our health systems and emergency preparedness globally. Learning from our response provides an opportunity to consider what needs to be done differently and how to improve our healthcare system. The aim of this work is to describe a position paper on pandemic preparedness written by the Irish Society of Specialists in Public Health Medicine (ISSPHM). The ISSPHM was formed to provide a platform for SPHMs to advocate on issues of public health concern in Ireland and beyond.

Initially a working group of ISSPHM members was convened, and undertook national and international stakeholder consultation. International experience with COVID-19 response to date was reviewed and contextualized to the Irish setting. Strengths and limitations of the national response in Ireland were identified and described.

This position paper was presented at the formal launch of the ISSPHM in December 2021. It was published on the ISSPHM website and quoted in the media. While Ireland performed well in relation to case-related measures, it came with significant economic and social costs (e.g. developmental delay in children, loneliness) and has led to an increased backlog of healthcare demand.

In order to learn from this experience and ensure a more resilient health system, the ISSPHM recommends: 1. Review of governance structures for the delivery of Public Health, 2. Address longstanding and critical gaps in IT infrastructure and interoperability, 3. Further strengthen regional Departments of Public Health and 4. Promote Ireland as a global leader for health systems recovery and resilience.

Temporal trends of ambulance times for suspected stroke/tia before and during the Covid-19 pandemic in Ireland: a retrospective cohort study

Edel Burton

School of Public Health, University College Cork, Cork City, Cork, Ireland

Co Authors: Rory Quinn, Kieran Crosbie-Staunton, Conor Deasy, Siobhan Masterson, Cathal O'Donnell, Áine Merwick, David Willis, Patricia Mary Clare Kearney, Vera J.C. McCarthy, Claire Buckley,

National Ambulance Service, Health Service Executive, Dublin, Ireland. Department of Emergency Medicine, Cork University Hospital, Cork City, Cork, Ireland.

Abstract

The COVID-19 pandemic increased pressure on the Irish healthcare system and may have led to prehospital delays for time-sensitive emergencies, like stroke and transient ischaemic attack (TIA). Thus, we aimed to investigate the impact of the COVID-19 pandemic on ambulance times and emergency call volume for adults with suspected stroke/TIA in Ireland.

We conducted a retrospective cohort study of patients ≥ 18 years with suspected stroke/TIA, based on data from the National Ambulance Service. We included all cases assigned code 28 (suspected stroke/TIA) by the emergency call-taker, from 2018-2021. We compared ambulance times and emergency call volume by week, the four COVID-19 waves (defined by the Health Protection Surveillance Centre) and annually. The COVID-19 period was from 01/03/2020 - 19/12/2021 and the pre-COVID-19 period 01/01/2018 - 29/02/2020. Continuous variables were compared with t-tests and categorical variables with Pearson's χ^2 tests.

40,012 cases were included: 20,281 in the pre-COVID-19 period and 19,731 in the COVID-19 period. Mean patient age significantly decreased between the two periods, from 71 years (± 16.5) to 69.8 years (± 17.1); $p < 0.001$. Mean ambulance response time increased between the two periods from 17 minutes 31 seconds to 18 minutes 59 ($p < 0.001$). Mean calls/day increased from 25.1/day to 30.0/day during the COVID-19 period. The number of cases with symptom onset to emergency call time of > 4 hours significantly increased from 5581 to 6060 during the COVID-19 period ($p < 0.001$).

We note a marked increase in call volume for stroke/TIA between the COVID and non-COVID periods and an increase in response times. Longer symptom to call times may indicate a change in healthcare-seeking behaviour. System evaluation and public awareness campaigns are required to ensure maintenance of prehospital stroke pathways amidst future healthcare crises.

Cross-sectional Survey of Compliance Behaviour, Knowledge and Attitudes among Cases and Close Contacts during COVID-19 Pandemic

Patricia Kearney

Co Authors: Danko Stamenic, Kate Gajewska, Margaret O' Sullivan , Sarah Mary Doyle,
Orlaith O'Reilly, Claire Buckley

School of Public Health, University College Cork. Department of Public Health, Area D.
Department of Public Health, HSE SouthEast. Clinical Design and Innovation.

Abstract

In Ireland, a national contact management programme was established during the COVID-19 pandemic to notify cases, identify, and arrange testing for contacts and provide public health guidance. This study aimed to describe compliance behaviour and knowledge and attitudes towards COVID-19 among cases and contacts to inform the national response.

Cross-sectional telephone survey of cases and contacts identified from the national contact management database. A sample of 1,000 cases and 1,000 contacts was calculated to estimate compliance within a margin of error of 3% with 95% confidence. Trained interviewers collected information on socio-demographics, compliance behaviour, knowledge, and attitudes. Chi-squared statistics and multivariable logistic regression assessed socio-demographic characteristics and compliance behaviour.

Among symptomatic cases, 82.8% (n=444) reported compliance with self-isolation. Reasons for leaving home after symptom onset included work (45.7%), shopping (22.8%), exercise (13.2%), and medical appointment (10.9%). Among all 1027 cases >95% complied with self-isolation after testing with similar levels across sociodemographic characteristics. In the multivariable model, age was the only significant predictor of compliance. Of 91 cases who reported leaving home, reasons included exercise (55.9%), medical appointment (17.6%) and work (5.9%). Among 1078 close contacts, 86.6% complied with movement restriction with similar levels in men and women, all ages and regions. Of 140 contacts who reported leaving home, reasons included exercise (42.9%), shopping (28.6%) and work (22.9%). Cases and contacts reported high levels of understanding of COVID-19 transmission and satisfaction with public health guidance.

Achieving high compliance with public health guidance is feasible, requiring political leadership, policy changes and practical supports.

Ukrainian beneficiaries of temporary protection (BOTPs) in the mid-west of Ireland: a population health analysis and service delivery plan

Rachel McNamara

Department of Public Health Mid-West (Area E), Limerick

Co Authors: Leah Evans, Eva Rushe, Melanie Barnes, Patrick O'Donnell, Sarah Oakley, Majella Tobin, Anne Patricia Dee,

Department of Public Health Mid-West. Social Inclusion Unit, CHO3. Social Inclusion Unit, CHO3.

Abstract

Since the outbreak of war in Ukraine, almost 54,000 migrants have come to Ireland seeking protection. Several emergency Workstreams were formed nationally to respond to the health needs of this vulnerable population. A Health Needs Assessment (HNA) form was devised to; firstly, highlight health concerns warranting immediate attention, secondly, to capture demographics and health status and thirdly, to quantify the additional service requirement needed to care adequately for this group.

To date, 1928 HNA forms have been returned from 28 residential settings. Forms were distributed and collected by nursing and medical staff from Community and Public Health Mid-West. These were screened by a health practitioner prior to analysis. HNA forms were distributed in Ukrainian and in Russian and were completed for each member of the family, including children.

With regards to age distribution; for BOTPs below the age of 45, the ratio of female to male is 2:1 on average, whereby for those aged above 45, the ratio is 1:1. Forty percent of individuals (n=764) reported that they regularly attended a family doctor, community services or hospital outpatient services when in Ukraine. Six percent of individuals reported having received a booster dose of COVID-19 vaccine, compared with 72% of individuals in Ireland. Thirty-one percent of the cohort are aged under 18 (n=603), and 13% of this cohort reported not having received age-appropriate vaccinations. Over 10% of adults (n=140) self-reported as having some form of heart disease.

Ukrainian BOTPs in the Mid-West of Ireland are a population with a unique health status and specific health needs. Additional demands on women's health services, low rates of vaccination and high rates of chronic disease must be quantified and addressed by services locally, in order to ensure that this cohort can shelter successfully in the Mid-West.

E-scooters: last mile solution or threat to life and limb?

Kate O'Donnell

Health Protection Surveillance Centre

Co Authors: Christina Dillon, Paul McKeown, Natasha Rafter, Derval Igoe, Eve Robinson,

HSE-Health Protection Surveillance Centre

Abstract

Before May 2022, monkeypox (MPX) infection in humans occurred in endemic regions in Africa or as uncommon exportations from endemic regions. Since then, a global outbreak has been ongoing with over 70,000 confirmed cases reported globally in 2022. In July, it was declared by the World Health Organization (WHO) to be a Public Health Emergency of International Concern (PHEIC).

MPX infection was made a notifiable infectious disease in Ireland in May 2022. Notifications are reported on the Computerised Infectious Disease Reporting System (CIDR). Enhanced surveillance is undertaken by Departments of Public Health to collect supplementary data including demographic factors, clinical details and risk factors for infection.

One hundred and ninety-four MPX cases (192 male; 2 female) were notified in Ireland in the 4-month period to the end of September 2022. The median age of cases was 35 years (range 16-65 years). Where sexual orientation was reported, 99% identified as gbMSM (gay, bisexual or other men who have sex with men). Over a quarter of cases (28%) were living with HIV, with the majority (93%) on antiretroviral therapy (ART). Among HIV negative cases, 53% were on HIV pre-exposure prophylaxis (PrEP). In all, 16% reported co-infection with another STI at the time of MPX infection. Eleven cases (5.7%) were admitted to hospital for clinical care related to MPX infection. No deaths were reported.

Ireland is experiencing an ongoing outbreak of MPX infection and the epidemiological picture is similar to that seen in other non-endemic countries. A coordinated national response involving services across the HSE, working with gbMSM representative groups, is in place to mitigate against the impact of the outbreak and to control it. Key components include early diagnosis, isolation, and effective contact tracing, supported by appropriate vaccination strategies.

Social interaction and wellbeing in Irish older adults during the covid-19 pandemic

Parnian Jalili

School of Public Health, Physiotherapy and Sports Science, University College

Co Authors: Catherine M. Phillips

School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin

4

Abstract

Social distancing policies imposed during the COVID-19 pandemic were associated with social isolation and loneliness in older adults. This study investigated the level of social contact in older Irish adults during the COVID-19 pandemic, and the association of social contact levels to loneliness, and loneliness to mental and physical health.

Secondary data from a specific COVID-19 survey of 3,583 adults (≥ 60 years) in The Irish Longitudinal Study on Ageing were used in the study. Data were collected using a self-completion questionnaire between July and November 2020. Elements of the Centre for Epidemiological Studies Depression Scale and the University of California Los Angeles Loneliness Scale were employed. Non-parametric statistical tests were used to analyse the relationship between social contact, loneliness, health indicators, and demographic factors.

Over 80% of participants had in-person contact with family and friends once a week or less during the COVID-19 pandemic lockdown phase. Higher levels of remote contact (daily or several times a week) was reported (e.g., children, 67%; neighbours/friends, 33%). Participants (25%) reported a better relationship with people outside the home during the pandemic. Moderate-to-high loneliness and depression levels were present in 40% and 35% of participants, respectively. Prevalence of loneliness and depression was significantly higher in women, urban dwellers and those living alone. Loneliness was moderately correlated with depression ($r=0.56$) and self-reported mental ($r=0.46$) and physical health ($r=0.23$).

This study highlights the need for better understanding of how social isolation and loneliness impacted the wellbeing of older adults in Ireland during the COVID-19 pandemic. Development of public health measures to combat social isolation must acknowledge the heterogeneity present in the older population.

Migrants and the exacerbation of existing inequities associated with the emergence of a monkeypox outbreak in Ireland

Eoin Somers

Department of Public Health East CHO9

Co Authors: Ciara Carroll, Tessa O'Gorman, Mark McLoughlin, Kamini Gavin, Niamh Kelly, Muireann De Paor, Barbara Gilmer, Grainne Moynihan, Sarah Barrett, Gabriel Fitzpatrick, Mary O'Meara, Paul Mullane

Department of Public Health East CHO09

Abstract

The emergence of Monkeypox (MPX) in non-endemic countries across Europe has posed additional challenges for vulnerable migrants. Already faced with economic instability, housing challenges and language barriers, MPX has intensified the inequities faced by this group.

Public health management of MPX includes ensuring that suspected and confirmed cases can isolate appropriately and identifying close contacts to provide advice and offer vaccination. An isolation facility was identified for cases who could not isolate at home and a community vaccination team was established.

From 26/05/2022 to 17/10/2022, our department was notified of 83 MPX cases, with 134 related household contacts, representing the largest caseload of any department nationally. 61% (n=51) of cases were migrants, the majority from Latin America. 99% identified as gbMSM. Many cases lived in crowded or temporary accommodation where they had difficulty isolating, with 17% (n=9) of migrants requiring transfer to an isolation facility, compared with none in the Irish national group. The mean number of household contacts was significantly higher in migrants at 2 per case compared with 1 per case for Irish nationals ($p=0.008$), increasing potential for viral transmission and demand for vaccination. Some cases feared disclosing their illness due to perceived stigma associated with MPX, their nationality and sexuality; others were reluctant to isolate due to concerns about loss of income. Language barriers posed additional challenges when managing cases and contacts, leading to difficulties in conveying information and creating obstacles for self-advocacy.

This outbreak lays bare inequities affecting vulnerable migrants. Our experience highlights the need for adequate isolation facilities and access to financial support for those isolating, and to improve access to timely and appropriate care.

Social interaction and wellbeing in Irish older adults during the Covid-19 pandemic

Martina Gogarty,

School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin
4.

Co Authors: Celia O'Hare, Ruth Mary McDermott, Ruth Ceannt, Ina Kelly, Regina Kiernan,
Mary Teresa O'Mahony

Department of Public Health, HSE South East. Department of Public Health, Dr Steevens' Hospital. Department of Public Health, HSE East. Department of Public Health, HSE Midlands. Department of Public Health, HSE West. Department of Public health, HSE South

Abstract

Social distancing policies imposed during the COVID-19 pandemic were associated with social isolation and loneliness in older adults. This study investigated the level of social contact in older Irish adults during the COVID-19 pandemic, and the association of social contact levels to loneliness, and loneliness to mental and physical health.

Secondary data from a specific COVID-19 survey of 3,583 adults (≥ 60 years) in The Irish Longitudinal Study on Ageing were used in the study. Data were collected using a self-completion questionnaire between July and November 2020. Elements of the Centre for Epidemiological Studies Depression Scale and the University of California Los Angeles Loneliness Scale were employed. Non-parametric statistical tests were used to analyse the relationship between social contact, loneliness, health indicators, and demographic factors.

Over 80% of participants had in-person contact with family and friends once a week or less during the COVID-19 pandemic lockdown phase. Higher levels of remote contact (daily or several times a week) was reported (e.g., children, 67%; neighbours/friends, 33%). Participants (25%) reported a better relationship with people outside the home during the pandemic. Moderate-to-high loneliness and depression levels were present in 40% and 35% of participants, respectively. Prevalence of loneliness and depression was significantly higher in women, urban dwellers and those living alone. Loneliness was moderately correlated with depression ($r=0.56$) and self-reported mental ($r=0.46$) and physical health ($r=0.23$).

This study highlights the need for better understanding of how social isolation and loneliness impacted the wellbeing of older adults in Ireland during the COVID-19 pandemic. Development of public health measures to combat social isolation must acknowledge the heterogeneity present in the older population.

Covid-19 among asylum seekers–incidence, outcome severity and outbreaks in the direct provision population compared with the general population

Nicola Murphy

Department of Public Health Area D (Cork & Kerry)

Co Authors: Orla Bruton, Hannah Mary Teresa Sheahan,

Department of Public Health Area D (Cork & Kerry)

Abstract

The COVID-19 pandemic has placed a huge burden on our most vulnerable populations. Many direct provision (DP) residents contracted COVID-19 and endured multiple and prolonged outbreaks. This study aimed to assess whether those living in DP in Cork and Kerry had a higher incidence of COVID-19 infection and more severe outcomes than the general population and to describe the outbreaks that occurred in DP accommodation centres throughout waves 1-4 of the pandemic.

Data were extracted from the Computerised Infectious Disease Reporting (CIDR) system for the Cork/Kerry population from 01/03/2020-18/12/2021. The number of cases of COVID-19 in the general population were compared with that of the DP population. Data were collected on confounders such as age, sex, medical co-morbidities and occupation. Severity of illness was assessed by collecting data on hospital admissions, ICU admissions and deaths. Outbreaks were analysed during this time-period and described by numbers exposed, number of cases, attack rate and number of deaths.

The crude incidence rate of COVID-19 was marginally higher in the DP population than the general population. The mean age of cases was lower for the DP population. There were no ICU admissions or deaths recorded in this group. The DP population experienced 22 outbreaks involving 175 linked cases during waves 1-4, comprising 22% of the national DP outbreak statistics. These outbreaks required inter-agency co-operation and resulted in a significant workload.

Despite a higher incidence of COVID-19 in the DP population, there was no evidence of more severe outcomes compared with the general population. These findings should be interpreted with caution however, as CIDR data is suboptimal. A National Outbreak Case and Incident Management System is essential going forward.

The first 120 days in a public health emergency – the monkeypox experience in Cork and Kerry

Nicola Murphy

Department of Public Health Area D (Cork & Kerry)

Co Authors: Olga Jackson, Catherine Darcy Walsh, Orla Bruton, Hannah Mary Teresa Sheahan, Peter Barrett

Department of Public Health Area D (Cork/Kerry).

Abstract

In May 2022 the first case of monkeypox virus (MPXV) was notified in Ireland, with a total of 198 cases notified up to 08/10/2022. The spread of this virus throughout the country has resulted in substantial workload for Public Health Departments and necessitated the introduction of new protocols and testing pathways.

We describe all suspect and confirmed MPXV cases notified to the Department of Public Health (DPH) Area D between 20/05/2022-16/09/2022. Data were extracted from Computerised Infectious Disease Reporting (CIDR) and the MPXV Case and Close Contact Database. Where data were missing, case and close contact notes were reviewed by the project team. Active surveillance notes were consulted and relevant data extracted. Each team member provided an account of meeting attendances in the first 120 days.

36 suspect cases were notified to the DPH-Area D from 20/05/2022-16/09/2022. 30 (83%) met the criteria for testing, with 6 (16%) subsequently becoming confirmed cases. 31 close contacts were generated. Ten (32%) close contacts were healthcare workers. All were referred for post exposure vaccination with seven availing of same. Daily active surveillance was carried out for 11 contacts, resulting in 98 follow-up calls. 35 clinical queries were received including enquiries regarding testing pathways, General Practitioners who wished to notify a suspect case and calls from the gbMSM community enquiring about Pre-Exposure Prophylaxis (PREP). MPXV meetings accounted for a total of 78 hours of staff meeting attendance.

MPXV has brought about clinical, diagnostic and contact management challenges. Notifications of confirmed cases do not accurately reflect the clinical workload involved in control efforts. A number of confirmed and suspect cases had associated complex psychosocial and confidentiality issues, placing new demands on staff resources.

Social interaction and wellbeing in Irish older adults during the Covid-19 pandemic

Martina Gogarty

School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin
4.

Co Authors: Mary Bernadette Codd

University College Dublin

Abstract

Social distancing policies imposed during the COVID-19 pandemic were associated with social isolation and loneliness in older adults. This study investigated the level of social contact in older Irish adults during the COVID-19 pandemic, and the association of social contact levels to loneliness, and loneliness to mental and physical health.

Secondary data from a specific COVID-19 survey of 3,583 adults (≥ 60 years) in The Irish Longitudinal Study on Ageing were used in the study. Data were collected using a self-completion questionnaire between July and November 2020. Elements of the Centre for Epidemiological Studies Depression Scale and the University of California Los Angeles Loneliness Scale were employed. Non-parametric statistical tests were used to analyse the relationship between social contact, loneliness, health indicators, and demographic factors.

Over 80% of participants had in-person contact with family and friends once a week or less during the COVID-19 pandemic lockdown phase. Higher levels of remote contact (daily or several times a week) was reported (e.g., children, 67%; neighbours/friends, 33%). Participants (25%) reported a better relationship with people outside the home during the pandemic. Moderate-to-high loneliness and depression levels were present in 40% and 35% of participants, respectively. Prevalence of loneliness and depression was significantly higher in women, urban dwellers and those living alone. Loneliness was moderately correlated with depression ($r=0.56$) and self-reported mental ($r=0.46$) and physical health ($r=0.23$).

This study highlights the need for better understanding of how social isolation and loneliness impacted the wellbeing of older adults in Ireland during the COVID-19 pandemic. Development of public health measures to combat social isolation must acknowledge the heterogeneity present in the older population.

Public Health Education in Planetary Health

Mary Bernadette Codd

University College Dublin

Abstract

Planetary health in all its domains is inextricably linked with human activity and human health. As such, it is an increasingly vital component of public health education.

In updating core competencies for public health professionals published by the Association of School of Public Health in the European Region (ASPHER) in 2018 (5th edition), a scoping exercise of subject areas relevant to academic public health is underway. A survey of ASPHER-member Schools and Institutes of Public Health in Europe to establish areas of special expertise in public health programmes has thus far identified 23/30 (77%) with expertise in aspects of planetary health. These include environmental science (20/23); climate change (6/23); the built environment (2/23); physical, radiological, chemical and biological exposures (3/23); one health (8/23); and combinations of these. Respondents were invited to share indicative content of their curricula in these areas.

Information received has been collated into themes of: environment, health impacts, prevention, resolution, practice, policy and implementation science. Refinement of the curricular elements in each of these themes is underway, as well as identification of cross-thematic elements and linkages between them and other competencies in public health. This provides a potentially useful template for education in planetary health.

Recognising that not all schools or academic programmes may be in a position to support teaching in planetary health, consideration could be given to using the curricular elements defined and agreed to collate existing training materials and tools, and to share information and expertise through online platforms so that planetary health education could be integrated into all public health curricula at undergraduate and postgraduate levels.

Perception of air quality and support for government spending to improve air quality among residents of a high-deprivation town

Ann Marie Murray

University College Cork

Co Authors: Éilís O'Reilly, Stig Hellebust

School of Public Health, UCC. University College Cork

Abstract

Air pollution causes 4.2 million deaths globally annually. Accurate perception of air pollution can lead to adaptation and mitigation behaviours. The study aimed to understand the perception of air quality and support for government spending to improve air quality among residents of a high-deprivation town, where smoky-coal burning is permitted with exceedances of WHO Air-Quality Guidelines.

A survey was distributed online, in-person, and through flyer mail drop. Chi-square analysis was used to identify associations between socio-demographic variables and perception of air quality and support for government spending to improve air quality. Logistic regression was used to assess associations between socio-demographic variables and perception of air quality and support for government spending to improve air quality.

212 participants responded. Pro- pollution behaviours such as high frequency domestic fire use, dependency on coal to heat homes and car use was evident. Income levels were lower than regional averages. 38% of participants perceived air-quality as good/very good, females more so than males (42% vs 29%; $p=0.017$) and 24% perceived it as fair. Participants using coal for home-heating had 3.73 (95% CI:1.78-7.82; $p <0.001$) higher odds than those using oil to perceive the air-quality as poor. Participants were largely in favour of more government spending to improve air quality with no significant association found between any of the socio-demographic variables.

Lower income levels and high use of solid fuel highlights this population vulnerability to fuel poverty. The national smoky coal ban is imminent and the combination of lower incomes, pro-pollution behaviours, and positive perception of air quality may impact on resources and motivation for this population to mitigate their behaviours.

Early years services in Ireland as a setting for behaviour change in the context of healthy eating

Ellen Greene

School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin

Co Author: Celine Murrin

School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin

Abstract

Preschool-age is a sensitive period for the formation of eating behaviours and food preferences. Meeting dietary recommendations is important in this period of growth and development. The aim of this analysis is to qualitatively examine the suitability of Early Years Services (EYS) in Ireland as a setting for dietary behaviour change interventions among preschool children.

This research was conducted as part of a formative analysis prior to the evaluation of a pilot of the School Milk Scheme in EYS. Semi-structured interviews were conducted among a convenience sample of Early Years Practitioners and parents of 3 to 5 year-children attending EYS within the Greater Dublin Area, identified using Tusla's Register of Early Years Services. Interviews were recorded, transcribed and thematically analysed.

Six Early Years Practitioners and five parents of preschool children from five EYS (of 15 EYS invited to partake) were interviewed. The following themes emerged: Practitioner perceived role and responsibilities; EYS structure and type; education and curriculum; collaboration between EYS and parents. Food environments differed between EYS types (sessional versus full day). Practitioners described existing healthy eating promotion and education in their EYS. Most practitioners perceived that they had a professional responsibility to influence children's eating behaviour. Participants discussed the importance of communication between the EYS and parents in influencing children's learning and behaviour.

Several factors identified make EYS a suitable setting for dietary interventions. However, interventions should account for the various types of EYS and their food provision practices. Collaboration between parents and Early Years Practitioners acts as a link between the home and EYS food environment and supports the continuation of behaviour change outside of the EYS.

Testing regional preparedness to respond to measles in congregate settings A desktop exercise in Area B

Fiona McGuire, Fiona Cianci, Dorothy Ingoldsby, Kathleen Dunne,

SpR Public Health Department of Public Health, Area B - Midlands. Department of Public Health, Area B. Health protection nurse. SMO Public Health

Co Authors: Vogue Murphy

SMO Public Health Medicine

Abstract

Measles is a highly infectious vaccine preventable disease that could result in a significant outbreak within a congregate setting. The unprecedented influx of International protection applicants (IPs) and beneficiaries of temporary protection (BOTP) into Ireland has resulted in many of these centres being set up across the country. We aimed to test our response plan to a case of measles in a congregate setting in Area B.

A desktop exercise was conducted with representatives from regional public health departments, local social inclusion and SafetyNet primary care services. A mixed BOTP and IP setting in a hotel with approximately 250 occupants was chosen. The hotel setting means that all occupants would share the same air space as the index in dining rooms, and other shared facilities. Some high risk vulnerable contacts were transferred, prior to adequate vaccination, to two separate locations in Midlands and one child contact went on to develop a fever and cough and required testing.

Overall, the response plan in CHO7 described the roles and responsibility of each stakeholder correctly. Some operational challenges were identified and discussed with resolution amongst stakeholders. Clear communication pathways with other Government departments need to be established. Missing resources required such as translated materials were identified and actioned. Several challenges were identified in the Midlands region due to lack of a local social inclusion team and GP capacity to offer PEP. Key learnings were distilled and disseminated.

The congregate nature of many of these settings and the suboptimal immunisation levels expected could result in large outbreaks that could spread into the wider community. Movement of residents across regions could result in national spread. Each region should plan alternative pathways to offer PE.

Review of COVID-19 and Small Area Deprivation Across Four Pandemic Waves in Galway,
Mayo and Roscommon

Kathleen Mc Donnell

Department of Public Health, Area F, Merlin Park University Hospital, Galway.

Abstract

People living in high area deprivation are more likely to experience poor living conditions, lower life expectancy and live with chronic disease. These factors may place people at higher risk of severe COVID-19 outcomes. Research has demonstrated correlations between COVID-19 and high area deprivation. Investigating the relationship between area deprivation and COVID-19 may provide insights into the impact area deprivation may pose on COVID-19 outcomes.

A retrospective quantitative secondary data analysis of COVID-19 cases (n=55,178) and associated small area deprivation in Galway, Mayo and Roscommon across the first four COVID-19 pandemic waves (March 2020 to December 2021) was performed. Descriptive and comparative statistical analysis (Chi Square and Fisher Exact tests) were performed using the Statistical Package for the Social Sciences Version 28. Incidence rates were calculated using incidence rate formulae.

COVID-19 incidence was highest in the marginally above (26.52/100,000) and marginally below average (24.16/100,000) area deprivation groups. COVID-19 incidence was lower in the high area deprivation groups. The majority of COVID-19 deaths, 74.3% (n=322), occurred in the below average to very disadvantaged area deprivation groups. The majority of Intensive Care Unit (ICU) admissions, 60.8% (n=130), occurred in the below average to extremely disadvantaged area deprivation groups.

COVID-19 incidence was highest in the average area deprivation groups with lower incidence in the high area deprivation groups. COVID-19 incidence was not disproportionately represented in the higher area deprivation groups however severe outcomes from COVID-19 such as ICU admission or death were disproportionately represented in groups of high area deprivation. This may indicate that lower socio-economic groups were more likely to experience severe outcomes from COVID-19.

Comparison, by Country, of the Uptake of COVID-19 Vaccination by Health Care Workers in the EU/EEA January – June 2021

Therese McGlacken

Department of Public Health, HSE Area C

Co Authors: Mary Bernadette Codd

University College Dublin

Abstract

Health Care Workers (HCWs) are at high risk of exposure to COVID-19 when providing care to patients. We investigated the uptake of COVID-19 vaccination among HCWs in the EU/EEA and discuss the factors which influence this uptake.

The aim of this study was to compare, by country, COVID-19 vaccination uptake by HCWs from January to June 2021, to assist with policy making and prospective planning in these countries during the current pandemic and into the future.

The study population included all the countries in the European Union (EU) and European Economic Area (EEA). The secondary data file was downloaded from the European Centre for Disease Prevention and Control (ECDC) website. Descriptive and comparative data were analysed and presented using Excel and Chi-square test of hypothesis.

The percentage of HCWs in EU/EEA countries ranged from 1.2% to 5.1% per population. From January to June 2021, the percentage of first and second dose vaccinations of HCWs ranged from 20% to 100% and from 21% to 100%, respectively. The Comirnaty–Pfizer/BioNTech vaccine (COM) was the most administered vaccine in all EU/EEA countries, followed by the Moderna mRNA-1273 vaccine (MOD) and the Astra-Zeneca–Vaxzevria vaccine (AZ). The Janssen–Ad26.COV 2.5 vaccine (Janss) use ranged from 0.1% to 4.8% for the one dose vaccine. Hungary was the only country that administered the Sputnik V vaccine (SPU) and the Beijing CNBG vaccine (BECNBG). In January 2021, a median of 29% of HCWs received their first dose of COVID-19 vaccination. Italy was the only country with a mandatory vaccination policy for HCWs. Vaccination uptake rates were statistically different among EU countries ($p < 0.05$).

Magicapp pilot project for updating the guidelines for emergency management of injuries and post-exposure prophylaxis in Ireland

Paula Flanagan

Office of the Director of National Health Protection

Co Authors: Randal Parlour, Chloe Enright, Michelle Williams, Claire Gilbourne, Rachel Kiersey, Mairin Colette Carmel Boland (nee Hayes)

Office of the Director of National Health Protection

Abstract

Guideline development employs a rigorous process, underpinned by an evidence-based approach and quality assurance measures (NCEC, 2015). Online platforms for guideline development aims to streamline this process and improve transparency between guideline developers and users. One such platform is MAGICapp (Making GRADE the Irresistible Choice) (<https://app.magicapp.org/#/guidelines>). The Research and Guideline Unit (RGDU) are currently undertaking a pilot project with MAGICapp to determine its potential to aid future guideline development. Guidelines for the Emergency Management of Injuries (EMI) and Post-exposure Prophylaxis (PEP) were selected for this pilot with the HIV PEP recommendations prioritised for updating.

A Guideline Development Group was convened to oversee the review of the HIV PEP updates and a comprehensive search for national and international guidelines was undertaken. Twelve guidelines met the inclusion criteria and were appraised independently using the AGREE II (Appraisal of guidelines for research and evaluation tool) (Brouwers et al., 2016). The working group agreed to adapt the UK Guidelines for the use of HIV Post-Exposure Prophylaxis 2021 and the GRADE Adolopment framework for adapting, adopting and developing recommendations de novo informed this process (Schünemann et al., 2017).

Eight recommendations have been updated in MAGICapp and the direction and strength of each the recommendations were determined on the basis of four key factors: the balance between benefits and harms, certainty of evidence, patient values and preferences and resource considerations.

MAGICapp is a user-friendly online tool underpinned by an evidence-based, GRADE-informed approach that streamlines the updating, publication and dissemination of Public Health and Health Protection guidelines.

The impact of the omicron wave of Covid-19 on disability services in the south of Ireland,
December 2021 to April 2022

Orla Bruton

Department of Public Health Area D (Cork & Kerry)

Abstract

This study aims to describe the burden of COVID-19 infection on disability services during the fifth wave of the COVID-19 pandemic in the southern region in Ireland (December 2021 to April 2022).

Individual cases and outbreaks of COVID-19 in disability services notified to the Department of Public Health in Cork & Kerry (DPH Area D), between 19/12/2021 and 16/04/2022 were included. COVID-19 cases and outbreaks in other settings were excluded from this descriptive analysis. Available data were merged from local Department of Public Health infectious disease notification records. Sources include clinical notes, notifications from the national COVID-19 Contact Management (CRM) System and the national Computerised Infectious Disease Reporting System (CIDR). In the absence of a unique identifier common to both datasets, a manually generated unique identifier was used to merge data.

716 cases of COVID-19 associated with disability service settings were notified to the Department of Public Health Area D during the study period. Of these, 139 were epidemiologically linked to 55 distinct outbreaks. Eleven (n=11/716) (1.5%) of these COVID-19 cases were hospitalised at the time of COVID-19 PCR testing, but information on their reason for admission was unavailable. No ICU admissions and no deaths related to Covid-19 were reported. Vaccination information was available for 328 of the cases, of which, 98% were fully vaccinated. Twelve (n=12/716) samples were whole genome sequenced, all were the omicron variant.

The public health measures required to mitigate onward transmission of Covid-19 placed a considerable burden on both disability service users, their families, and on public health departments. It is important to continue to monitor severity of disease in residential settings and ensure public health measures are commensurate with the level of risk.

An evaluation of the Women's Health Service (WHS) and Anti-Human Trafficking Team (AHTT)

Therese McGlacken

Department of Public Health, HSE Area C

Co Authors: Fiona Cianci, Dearbhail O'Flynn,

Department of Public Health, Area B. Department of Public Health East.

Abstract

The HSE Women's Health Service (WHS) and Anti-Human Trafficking Team (AHTT) is a statutory service provided by the Health Service Executive. The WHS operates sexual health clinic services and outreach support to women/trans women involved in the sex industry. The AHTT has responsibility for care planning for both female/male victims of trafficking in all areas of exploitation.

A mixed-method evaluation of each programme was undertaken to identify areas for improvement for each service.

A Donabedian approach for the description and evaluation of the service was adopted. Semi-structured interviews with program staff were conducted to describe the service and perform a SWOT analysis of the services provided. A literature search was conducted to describe the health needs of both female sex workers and victims of trafficking, barriers to access of health care and evidence-based best practice interventions aimed at improving access to healthcare in these populations. Available service utilisation data was analysed to describe each service's output.

Sex work is associated with high levels of social stigma, marginalisation and poor mental and physical health. Victims of human trafficking suffer multiple physical, psychological, and sexual and reproductive health problems. Response to victims of human trafficking should be trauma-informed and culturally sensitive and requires streamlined collaboration and communication.

Several opportunities to improve the system were recommended including the separation of service with each developing their own mission statement and objectives be informed by service-user views. The use of a secure, safe, fit for purpose IT system is required for both services to enable appropriate record keeping, audit and evaluation of the services on an ongoing basis and the establishment of clear referral pathways and improved communication networks.

The national SARS-CoV-2 whole genome sequencing surveillance programme

Carina Brehony

HSE Health Protection Surveillance Centre

Co Authors: Niamh Murphy, Emer Liddy, Nicola Mellotte, Suzanne Cotter, Jonathan Dean,
Patrick Stapleton, Lois O'Connor, Carina Brehony,

HSE Health Protection Surveillance Centre. National Virus Reference Laboratory University
College Dublin. University Hospital Limerick. HSE Public Health, Area A.

Abstract

A national SARS-CoV-2 Whole Genome Sequencing (WGS) Surveillance Programme was set up in 2021 with the aim of “tracking the molecular epidemiology of SARS-CoV-2 in Ireland to inform and enhance the urgent public health response to the COVID-19 pandemic” .

The Programme is designed as a ‘hub and spoke’ model, led by the Health Protection Surveillance Centre partnering with the National Virus Reference Laboratory (hub) and seven acute hospital laboratories (spokes), representing the six Regional Health Areas and Children’s Health Ireland Hospitals. There are two streams within the Programme’s SARS-CoV-2 WGS surveillance strategy: 1. National surveillance of SARS-CoV-2 variants, including samples from GP sentinel sites and severe acute respiratory infection (SARI) surveillance, vaccine effectiveness studies, hospital in-patients and intensive care cases. 2. targeted surveillance of risk groups including some outbreaks, travel associated cases or cases with unusual epidemiological/clinical characteristics.

As of 23/09/2022, 88,843 COVID-19 cases (5.6% confirmed cases) have been sequenced since week 51, 2020. Data produced contributes to: the shaping and development of Public Health Policy in Ireland; local and national clinical and public health action; tracking variants nationally (biweekly variant report); the global community through reporting of WGS data to ECDC’s TESSy surveillance system, WHO and global repository GISAID.

The establishment of this Programme has brought together a network of WGS experts including Scientists, Microbiologists, Public Health Physicians and Epidemiologists. The collaboration has built a sustainable nationwide WGS surveillance programme, including the required laboratory equipment, technical skills, expertise and logistical arrangements, ready for expansion to other pathogens. It will be a key component of future pandemic preparedness.

Outbreak of verotoxigenic E. coli following a social gathering in the north west of Ireland

Teresa O'Dowd

Department of Public Health Medicine HSE North West

Abstract

The Department of Public health in the North West was notified of a case of VTEC O26:H11 in a person who had attended a social gathering in the summer of 2022. An outbreak was declared after it was discovered that other guests attending the event were unwell. A multidisciplinary outbreak control team was established.

A retrospective cohort study design was utilised. Event menus were obtained and an outbreak-specific questionnaire was drawn up. Phone interviews were completed with consenting guests. Food-specific attack rates, relative risks, and 95% confidence intervals were calculated for the consumption of food items. Associations between food items and illness were assessed using the Chi-square test. Environmental health completed an inspection of Venue X and sent food samples from the venue kitchen for microbiological analysis.

Of 135 event guests, 56 guests completed the full interview and 28 guests reported symptoms consistent with the case definition. 2 guests attending this event were symptomatic in the days before the event and one of them vomited at the event. Further investigation of the guests who were sick before the event revealed exposure to cattle and sheep.

Only the index case sought medical attention. All cases recovered fully with no complications or deaths. 10 event guests submitted stool samples, 3 of these tested positive for VTEC and whole genome sequencing confirmed these samples differed by 0 alleles, suggesting they shared the same common exposure. Statistical analysis of the food items consumed at the event did not suggest the source of this outbreak was food-borne. The epidemic curve peaked 2 days after the event and its shape strongly suggested a common point source.

Environmental, epidemiological, and microbiological investigations point to an animal source for this outbreak with secondary P-P spread at the event.

Factors associated with obesity in young adults in Ireland

Triona McNicholas

Specialist Registrar in Public Health Medicine, Health Service Executive, Ireland

Abstract

Obesity is a significant public health challenge and major determinant of non-communicable disease. Its prevalence rises with age, and young to middle adulthood is a period when excessive adipose tissue accumulates. This study aims to analyse factors associated with obesity in adults aged ≥ 15 years and in a sub-group aged 25-34 years in Ireland.

Data from the first wave of the Healthy Ireland (HI) Survey, a large nationally representative survey of adults aged ≥ 15 years in the Republic of Ireland, were used in this study. Obesity was measured using Body Mass Index (BMI). Participants with a BMI ≥ 30 were classed as obese. Multivariable logistic regression was used to assess factors associated with obesity in the whole population and in the age subgroup 25-34 years old. The analysis was repeated stratifying by gender.

The prevalence of obesity was 23% in the population aged ≥ 15 years, and 17% in adults aged 25-34 years. Living in a deprived area (OR 1.45; 95% CI 1.21, 1.73; p-value < 0.001) or urban areas outside of Dublin (independent of deprivation) (OR 1.45; 95% CI 1.21, 1.73; p-value < 0.001) was associated with obesity in adults aged ≥ 15 . Female sex was protective (OR 0.79; 95% CI 0.69, 0.90; p-value < 0.001), however not in the age group 25-34 years (OR 0.88; 95% CI 0.60, 1.29; p-value 0.522). Physical inactivity increased odds of obesity in the whole population (OR 2.02; 95% CI 1.58, 2.57; p-value < 0.001) and in adults aged 25-34 years (OR 2.09; 95% CI 1.30, 3.66; p-value 0.002). Alcohol consumption is associated with obesity only in men (OR 1.36; 95% CI 1.04, 1.80; p-value 0.027), highlighting the need to consider gender differences in strategies to tackle obesity.

This study and highlights factors associated with obesity in adults in Ireland and in a subgroup of adults aged 25-34 years, and identifies areas for further research and policy intervention.

Hookah smoking in Ireland-an overlooked aspect for tobacco control?

Salma Alkalbani

National Health Intelligence , Jervis House, Dublin 1

Co Authors: Paul Kavanagh

National Health Intelligence, Strategic Planning and Transformation, Jervis House, Dublin 1.

Abstract

Ireland has focused on tackling traditional tobacco products, but less attention has been paid to alternative tobacco products such as hookah smoking. As Ireland becomes more demographically diverse and as smoking inequalities widen, it is timely that this challenge be characterized. This study presents a geospatial analysis of hookah retail in Ireland and discusses implications for public health.

Literature on the epidemiology and public health aspects of hookah use was reviewed. A web-based search was conducted to identify hookah retail outlets in Ireland. HeathAtlasIreland was used to map the outlet addresses extracted and to describe the socio-demographic characteristics of associated electoral district areas and Regional Health Areas.

Although the epidemiology and public health aspects of hookah usage are widely reported globally, data for Ireland is limited. In total, 39 (100%) hookah retail outlets were identified (8 tobacco stores, 12 restaurants, 5 cafés, and 14 bars). Most (n = 32) were in Dublin County, with the highest proportions (n = 16 each) in RHAs A and B. The highest proportion of hookah establishments was in North City 2075 ED (n = 8). Young age group (25-35 years) was found to be higher at EDs containing hookah outlets than at the national level. Most of the population was affluent or marginally above average, with the disadvantaged/seriously disadvantaged forming the minority of the EDs containing hookah outlets. While most of the ethnic heritage was from White Irish, ethnic diversity featured the EDs containing hookah outlets.

This novel study provides an initial characterization of the hookah retail environment in Ireland, an often-overlooked aspect of tobacco control. Action is required to ensure that hookah harms are effectively communicated and controlled, and users of these products are not left behind as Ireland becomes tobacco-free.

Type 2 Diabetes Mellitus and undiagnosed Heart Failure. Associated or not?

Laura Donoghue

University College Cork -School of Public Health

Abstract

Heart Failure (HF) is a medical condition where the heart does not work as efficiently as it should. This means that your blood cannot deliver enough oxygen and nourishment to your body to allow it to work normally.[2] T2DM can be associated with HF.[3] Approximately 90,000 people live with HF in Ireland today.[2] In Ireland it is suggested that 2% of the population have symptomatic HF while another 2% have asymptomatic HF [2].Diabetes is a risk factor for HF. HF affects approximately 30-40% of patients with T2DM.[4] Natriuretic Peptides are recommended as an initial diagnostic test in patients to help rule out HF.[5] An NTproBNP result greater than 125pg/ml is a strong indicator of HF and further tests would be recommended.In primary care settings, diagnostics values of NPs and an Echocardiogram (ECHO) are useful to help establish a diagnosis of HF.

The twin aims of this study are:

- Estimate the prevalence of undiagnosed HF in patients with T2DM in three GP practices in Glanmire, a Cork suburb. (quantitative)
- To examine the experience of clinical stakeholders involved in the initiative. (qualitative)
- Participating patients will have NT-proBNP tested concurrently with routine T2DM blood tests (HBA1cs)

Patients with abnormal NT-proBNP will also be invited for a consultation with their GP to discuss further HF assessment. This may include several visits to GP practice, ECHO, and cardiology specialist consultations. Qualitative interviews will be conducted to examine the experience of clinical stakeholders involved in this project.

Not all of the results have been collected as this study is still ongoing.

The most recent findings include:

- No new referrals to a cardiologist, Vascular Surgeon or Endocrinologist resulted from patients with elevated NTproBNP
- 40% of patients had an elevated NTproBNP.
- 80% of the patients have a history of hypertension.

COVID-19 Outbreaks in cruise ships attending Dun Laoghaire port in the 2022 season

Katie Corridan

Department of Public Health Area C

Co Authors: Jacqueline Mary McElhinney, Helena Geraldine Murray

Abstract

The cruise ship season runs from March to October. During the COVID-19 pandemic cruise ships were not permitted to enter Irish waters from March 2020 to 2022. Cruise ships are obliged to submit a Maritime Declaration of Health (MDoH) detailing all COVID-19 cases on board prior to arriving. The ship's medical team manages outbreaks according to their own outbreak management plan. However, public health monitors these outbreaks, with large (>5% positivity rate among crew/guests) or rapidly increasing outbreaks triggering public health risk assessment. This may involve advising the return of the cruise ship to the home port under International Health Regulations (IHR). This study describes the epidemiology of COVID-19 outbreaks in Dun Laoghaire port during the cruise ship season of 2022.

This observational study is based on descriptive epidemiology in the MDoH of cruise ships as notified to the public health department. In the outbreak investigations described, data was collected as part of routine practice in line with the Medical Officer of Health legislation.

The port tendered to 69 cruise ships during the season, 41 (59.42%) notified public health of COVID-19 outbreaks on board. The median number of cases was 17 (range 1- 73). The mean number of guests was 1,220 and crew 782. The median positivity rate among guests was 0.21% (range 0-7.99%) and among crew was 1.25% (range 0-7.14%). No cruise ship required additional isolation facilities ashore. Until October 2022, the majority of cruise liners required guests be fully vaccinated.

This observational study shows that the mandatory vaccination policy for guests offered a protective effect compared to crew. We recommend mandatory vaccination for guests and for crew. This study will inform policy makers & public health resourcing for managing COVID-19 outbreaks on cruise ships in Irish ports.

Winter preparedness in RCF'S

Colette Magnone

Health protection nursing team NE

Abstract

The purpose of the study was to gauge how prepared long term residential care facilities were with regards “Winter Preparedness” in the North East. To identify key action areas that the Health Protection Nursing Team could potentially support and to use the knowledge in the production of a Winter Preparedness document for circulation to the RCF's in CHO 8 and CHO 1.

A small cross section of both private and public RCF's were identified within CHO 1 and CHO 8 to which the survey would be forwarded. An Introduction to the study with Questionnaire attached was emailed to the person in charge of the facility with follow up email/call if required. Survey focused on four main preparedness areas, Respiratory and Gastrointestinal illness, Covid 19 and Outbreak plans.

7 out of 8 surveys were completed and returned. Gaps in knowledge were identified especially in relation to obtaining dual swabs for Covid and influenza testing and the need for a clear pathway for the processing of swabs. Survey results also highlighted the need for Covid and influenza vaccine promotion among staff and residents to encourage update of vaccines.

The main implications identified was the need for a clear pathway in relation to dual swabbing and further education and promotion on covid and influenza uptake. Educational sessions have been arranged for all RCF's in the area.

Innovative Health Assessment Tool Utilised For Displaced Persons from the Ukraine

Niamh Kelly

Department of Public Health East

Co Authors: Sarah Barrett, Grainne Moynihan, Patricia Moran

Abstract

In February 2022, a large number of displaced persons arrived in Ireland from the Ukraine, feeling their country from impending war.

In response to the emerging humanitarian crisis, the Public Health team in Community Healthcare Organisation 9 Dublin North City and County (CHO9 DNCC), in partnership with the Social Inclusion (SI) team, set about planning a unique method of engaging these populations. A health and wellbeing assessment centre was designed and set up in the North Road, Co. Dublin.

The aim of the centre was to integrate the Ukrainian population into local and national services, referring those in need of immediate care to the acute settings, and guiding those with chronic health conditions to the services they needed.

Before the HSE Beneficiaries of Temporary Protection Health Integration Centre opened its doors, the Health Protection nursing team, in collaboration with the wider multidisciplinary team (MDT), developed the health assessment tool. The document assisted in the identification and documentation of health needs and assessed Covid19 testing and vaccination, as well as TB screening and childhood vaccination. It also provided valuable one-to-one time with the displaced persons to identify any health issues they may have had and allowed the nursing team to signpost to important services within their community. The nursing team were offered the opportunity to practice key skills, well defined with their work in public health. There was a clear demonstration of communication skills, critical thinking and expert data collection. The health assessment form was a unique to the population it served.

The experience at the HSE BOTP Health Integration Centre was a special opportunity for the health protection nursing team; advocating for those at a time of crisis and promotion of key public health messaging.

Interactive data visualisation: insights gained from developing a new national Covid-19 seroepidemiology hub in Ireland, 2021-2022

Laurin Grabowsky

Health Protection Surveillance Centre, Dublin

Co Authors: Katie O'Brien, Jennifer Doyle, Thomas Roux, Eoghan McCarthy, Ciara Kelly, Simon Bergin, Liam Murray, Eimear Hayes, Derval Igoe.

Abstract

Health data are often communicated via static reports and publications. In 2021, the Health Protection Surveillance Centre Seroepidemiology Unit was established and embarked on a process to design and implement an interactive online data hub as a means of communicating serosurveillance data and supporting public health decision making. The aim of this development was to invite audience engagement with the output, reduce the lead time between the receipt and communication of seroprevalence data, and create a streamlined reproducible workflow.

Data formats and transmission cadences were established and agreed with partners, and data manipulation processes were scripted in R to eliminate dashboard manipulations during data updates. Standard operating procedures were agreed and documented in tandem. Iterative and regular development meetings were held with an ArcGIS expert where design mock-ups and beta analyses were developed, and the infrastructure of the data hub was then designed in partnership. Stable data input files were structured to link seamlessly with finalised dashboard features.

The Seroepidemiology of COVID-19 Data Hub went live in July 2022, and has received almost 2,000 unique views with an average screen time of 5 minutes per user. Fortnightly updates have received repeated media coverage. The retrieval, manipulation, and publication of current serosurveillance data has been streamlined and automated resulting in minimal lead time between data receipt and dissemination, and the elimination of single points of failure in analysis and communication.

Considerations before embarking on a similar design process include: the structure and protection of the data, the frequency of updates, the repeatability of manipulations, the infrastructure and support available in the design process, and the platforms required to produce and host a dashboard display.

Tuberculosis in therapy audit: Preventative and curative therapy monitor

Tessa O' Gorman

Department of Public Health - Area A, Infectious Diseases Department MMUH & CEPHR,
UCD, Dublin.

Co Authors: Daragh McGee, Aoife Cotter.

Abstract

Tuberculosis (TB) is a preventable and curable disease. However, treatment side effects require close monitoring of symptoms and LFTs to ensure adequate compliance with treatment and disease control. This is important as MDR-TB becomes more prevalent and the increase of inward migration from countries with higher incidences of TB. The current care of TB patients attending the Infectious Diseases (ID) Department of the Mater Misericordiae University Hospital was evaluated against the TB Therapy Audit Form recommended by the National TB Guidelines.

From January to December 2021, 18 patients on TB treatment were identified and 15 audit forms were completed. Medication compliance was documented as assessed at 66% of visits, 2 (13%) patients were on directly observed therapy. LFTs were performed at 99% of the visits. Of 72 LFTs performed, there was one occurrence of elevated ALT (1%). Fever was the most frequently assessed symptom at 78% of all visits. Rash, jaundice, and dark urine were the least frequently documented symptoms.

The low numbers included may relate to the impact of COVID-19 on inward migration and delayed presentations. Also, due to the absence of a local TB registry it is likely not all patients on TB treatment were captured e.g. transfer from other centres or with suspected rather than microbiologically proven disease. The audit relied on review of documentation, therefore symptoms assessed but not documented were not captured. Underreporting of relevant negative symptoms may reflect omissions from documentation rather than lack of assessment.

Since completion of the audit a Joint ID-Respiratory MDT meeting has been established and a local registry of patients has been created to assist in the monitoring of safe and efficient TB treatment and to facilitate future audits. A proforma is being established to improve documentation of safety assessments.

Neurological and cognitive outcomes from heading the football in female soccer players: A systematic review

Irene Gorman

School of Public Health, UCC

Co Authors: Éilis O'Reilly

School of Public Health, UCC.

Abstract

There is concern that female soccer players are at risk of adverse outcomes from the repetitive sub concussive effects of heading the football. The aim of this review is to assess the evidence for adverse neurological and cognitive outcomes from heading the ball in female athletes.

This systematic review was performed according to the Preferred Reporting Items for Systematic Meta- Analyses guidelines (PRISMA). Three electronic databases were searched: PubMed, Web of Science and PsycINFO. Inclusion criteria followed the PICOS approach (population, intervention, control, outcome, study design). The population was female soccer players, the intervention was measurement of heading the football, the outcomes were neurological, cognitive, psychological, radiological changes.

The electronic database search found 447 articles from PubMed, 1180 articles from Web of Science and 95 articles from PsycINFO, a total of 1722 articles. 13 articles met the inclusion criteria. Nine of the studies focused on the short term effects of heading on cognition; four studies found no effect, two studies found no effect on cognition but described neurological symptoms, three studies found significant changes in cognition from heading. One study reported radiological abnormalities, widespread white matter alterations, in women associated with heading. One study described adverse mental health outcomes and lower verbal memory scores in retired female players who had frequent heading during their career, compared to those who rarely headed the ball.

There is inconclusive evidence on the adverse short term effects of heading. This review was limited by the lack of long term studies. However, the long term study reported, and the radiological data, are concerning and suggest a need for caution, immediate protocol review and further research.

Lessons from a successful public health response to covid-19 in a complex residential care facility

Shaunna Kelly

Department of Public Health, HSE Area C

Co Authors: Anne Healy, Tara Jane Donnelly, Susan Keane, Phil Downes, Niall Conroy,

Department of Public Health, HSE Area C.

Abstract

Outbreaks of Coronavirus Disease 2019 (COVID-19) in residential care facilities (RCFs) have been associated with significant mortality, and have posed numerous challenges for Public Health in Ireland throughout the pandemic. While Public Health and Infection Prevention Control (IPC) guidance provides expert-recommendations, further important lessons can be learned through direct experience in RCF outbreak management.

In this case study, a COVID-19 outbreak in a large and complex RCF, and the associated Public Health response is analysed. Lessons learned will be reflected upon and recommendations made in order to support the responses of others as we approach winter.

The outbreak in a RCF in Dublin was declared on 16/8/22 when 2 resident and 3 staff cases were reported to Public Health Area C. By the end of the outbreak on 17/9/22, 13 staff members (out of 145 total), and 32 residents (out of 134 total) had tested positive across 5 floors. Key public health measures which helped to successfully bring this outbreak under control included:

advice and guidance (including early cohorting of cases to a 'Red Zone' and surveillance for mild symptoms), regular OCT meetings which enabled collaboration with various stakeholders (including external RCF management, community IPC leads, and the surveillance team), daily data collection, epicurve generation and floor plan analyses (which aided understanding in OCTs), and a debrief meeting post-outbreak closure with the RCF (to allow reflection on lessons learned)

While experiences from a single outbreak may not be generalizable to all settings, this case study provides insight into the key lessons learned when managing a complex COVID-19 outbreak in a RCF. This may be particularly useful given the enhanced transmissibility of omicron variants and the challenge posed by a potential 'twindemic' as winter approaches.