All Ireland Social Medicine Meeting

9th September 2010

Ulster Museum, Belfast

Book of Abstracts
## Session 1  10.00 am – 11.15 am

**Chair:**  
Dr Naresh Chada  
Department of Health, Social Services & Public Safety

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| 10.00 am | Forecasting and monitoring the burden of chronic conditions on the island of Ireland            | Mr Steve Barron  
IPH                                                   |
| 10.15    | Alcohol – attributable mortality in Ireland                                                     | Dr Jennifer Martin  
DPH, Galway                                 |
| 10.30    | The negotiation of sexual relationships and reproduction amongst HIV sero-different couples     | Ms Carmel Kelly  
QUB                                                  |
| 10.45    | One year evaluation of patient attitudes to a total hospital campus smoking ban in the Republic of Ireland | Dr Kirsten Doherty  
St. Vincent’s University Hospital                   |
| 11.00    | Gambling: a public health perspective                                                          | Ms Claire Higgins  
IPH                                                  |
| 11.15    | Multilevel analysis of multi-vehicle road traffic collisions in Ireland 1996-2006              | Erica Donnelly-Swift  
TCD                                                  |
Chronic conditions cause significant illness, disability and death; and are responsible for substantial financial costs to individuals and families, the health and social care system, and the economy. This study provides estimates (for 2007) and forecasts (to 2015 and 2020) for the population prevalence of hypertension, stroke, angina and heart attack (CHD), and diabetes at national and sub-national levels across island of Ireland. Figures are broken down by sex, age and local area deprivation.

Risk estimates were abstracted from UK reference studies that incorporated the effects of demographic characteristics (sex, age and ethnicity), local socio-economic circumstances and lifestyle issues (obesity and smoking). These were then applied to population counts and projections to obtain the prevalence figures.

The study found that:

- Large numbers of adults live with these conditions.
- The burden is unequally distributed across the island with people living in more deprived areas being more likely to have one of these conditions
- Between 2007 and 2020, the number of people with one of these conditions is expected to increase dramatically with relatively more of the burden falling on people in the older age groups.

The study underlines the need to redouble our efforts to prevent these conditions and to manage their consequences when they do occur. It highlights the need for a stronger focus on tackling inequalities based on a social determinants of health and life course perspective.
Aim

To calculate Irish alcohol attributable fractions (AAFs) and to apply these measurements to existing data in order to quantify the impact of alcohol on mortality.

Methods

Exposure of the Irish population to alcohol was derived from a national survey and combined with estimates of the alcohol-disease/injury risk association from meta-analyses in the international literature to calculate Irish AAFs. In diseases for which relative risk estimates were not available, such as injury, AAFs were taken directly from Ridolfo and Stevenson (2001). AAFs were applied to national datasets to calculate alcohol-attributed mortality caused or prevented and potential years of life lost (PYLL) or saved (PYLS).

Results

In Ireland, over the five year period from January 1, 2000 to December 31, 2004 alcohol was estimated to have caused 4.4% (6,584) of deaths and 10.8% (131,245) of all-cause PYLL. Alcohol was estimated to have prevented 2.7% (3,967) of deaths and 1.5% (18,285) of all-cause PYLL. This resulted in an estimated net effect of 1.8% (2,616) of deaths and 9.3% (112,959) of all-cause PYLL. Chronic conditions were responsible for 69% of alcohol attributable deaths and acute conditions for 31%. Conditions not wholly attributable to alcohol accounted for 83% of deaths as opposed to 17% for conditions wholly caused by alcohol.

Conclusions

This study showed for the first time the full magnitude of deaths from alcohol in Ireland, and revealed that while young people and those dependent on alcohol are at high risk of negative outcomes due to alcohol, particularly acute injuries, at an individual level, at a population level it is in fact moderate drinkers and chronic diseases, not wholly attributable to alcohol, that are associated with most alcohol attributed deaths. The findings of this study suggest that policies focusing on the whole population attitude to alcohol, and chronic conditions and conditions partially attributable to alcohol would yield considerable public health benefits.
Title: The negotiation of sexual relationships and reproduction amongst HIV sero-different couples

Authors: Kelly, C., Lohan, M., Alderdice, F. and Spence, D.
Organisation: School of Nursing and Midwifery Research Unit, Queen’s University Belfast
Contact: Carmel Kelly, Lead Nurse Sexual Health, South Eastern HSC Trust, Downe Hospital, Downpatrick. Email: carmel.kelly@setrust.hscni.net.

Background

To date, the focus of research with HIV positive sero-different couples has been on HIV transmission risk. As such, risk has normally been considered in isolation of the couple’s relationship. The aim of this paper is to consider how the narratives of heterosexual women and men in sero-different relationships shaped the social meaning and processes attached to the risks they were willing to take. We also explore how gender, ethnicity and the positive partner’s undetectable viral load shaped the re-negotiation of sex following HIV diagnosis and informed reproductive decision-making.

Method

The paper draws on the experiences of six women and four men (not the partners of participating women), living in Northern Ireland, who, with their partners, were actively on a reproductive trajectory. The research design of the study is a longitudinal qualitative study and interviews took place at key stages of the reproductive trajectory for each interviewee. Eighteen in-depth interviews were conducted during 2008-2009. Interviews took the form of open-ended narratives and the analysis was informed by narrative analysis techniques.

Results

The results show that physical pleasure, love, commitment, and a desire to conceive naturally without interventions and a dislike of condoms within stable relationships were all given as justifications for risk-taking. In addition, the subjective logic that a partner had not previously become infected through unprotected sex prior to knowledge of HIV status and the added security of an undetectable viral load was the primary rationalisation for risk-taking for most of the men and also some of the women.

Conclusion

The findings speak to the importance of reframing public health and clinical counselling discourses on risk to acknowledge how couples negotiate risk, pleasure and commitment within ongoing relationships, rather than the simple generalised statements about HIV transmission risk, which currently dominate public health campaigns.
St. Vincent’s University Hospital implemented a total campus ban of smoking in January 2009 and was one of three hospitals worldwide to be awarded a nomination for the European Network of Smoke Free Hospitals (ENSH) Gold Award in 2010.

A repeat census survey of all inpatients in the hospital was conducted across a single day in March 2010, one year post ban. The interview focused on smoking prevalence validated by carbon monoxide testing, acceptability of the ban and the impact on smoking habits.

Of the 427 inpatients, 183 were available and fit to interview, 156 were deemed too ill by the Clinical Nurse Manager, 57 refused to participate and 31 were not found after two attempts (response rate 76%). Smoking prevalence among interviewees was 18%. There has been a significant shift of patient acceptability in favour of the ban, rising from 59% in 2006 to 84% in 2010; support was 95% in never smokers, 90% in ex-smokers and 49% in current smokers ($p<0.01$). Those aged $\geq 55$ years were significantly more likely to agree with the ban than those younger ($p<0.05$); there was no significant difference according to sex and GMS entitlement. Patients who smoke reported the ban had made them think about stopping (24%), helped them to stop (18%) and helped reduce the number of cigarettes smoked (42%). Of the current smokers on the general wards only seven continued to smoke while in hospital.

We conclude acceptability is high, though total abolition in policy terms is social norm dependent.
Title: Gambling: a public health perspective

Author: Claire Higgins
Organisation: Institute of Public Health in Ireland
Contact: Ms Claire Higgins, email: claire.higgins@publichealth.ie

Background

There is now a wealth of international evidence showing a link between gambling practices and health outcomes. Gambling legislation in both Northern Ireland and the Republic of Ireland is currently under review which presents an opportunity to ensure the health implications associated with problem gambling are given consideration.

Method

The Institute of Public Health in Ireland has reviewed a range of evidence to determine how gambling impacts on health. A policy paper has been developed for policy-makers who are currently reviewing gambling legislation across the island of Ireland. It is identified that problem gambling only affects a small number of the population but there are identified vulnerable groups who are more likely to gamble and therefore susceptible to the health impacts associated with gambling.

Results

In society, gambling can be seen along a continuum from those who do not participate in the activity to those who have a moderate to severe addiction. This continuum impacts on health as problem gambling has mental, physical and economic implications. The pressure of sustaining a gambling habit by hiding the addiction or finding the funds to maintain it affects mental health due to stress and anxiety related illnesses. The financial aspect of maintaining a gambling habit can impact on poverty leading to lower incomes in households which can impact on resources available for food and heat.

It is recognised that some groups may be more vulnerable to becoming involved in gambling and therefore more at risk of developing a problem. Problem gambling has a proportionately greater impact on low income groups and gambling practices are more evident in lower socio-economic groups. Men are more likely to gamble than women and older people are also identified as vulnerable due to their limited incomes. Adolescents are identified as major risk as gambling levels in this group has been shown to be 2-3 times the rate of adults. Habits formed in adolescence have the potential to develop into problem gambling practices in later years. Other groups identified as vulnerable include offenders and those with close proximity to gambling outlets.

Conclusion

This presentation will provide an overview of the health impacts of gambling and illustrate the groups vulnerable to becoming more involved in the practice. Across the island of Ireland gambling legislation is currently being reviewed and this paper presents a series of recommendations for policy-makers.
Title: Multilevel analysis of multi-vehicle road traffic collisions in Ireland 1996-2006

Author: Erica Donnelly-Swift, Alan Kelly
Organisation: Department of Public Health & Primary Care, Trinity College Dublin
Contact: Erica Donnelly-Swift, email: donneler@tcd.ie

Background

Road traffic collisions are a major economic and personal burden on society. The European Union has set a target to reduce annual road deaths by 50% over the period 2001 to 2010. Currently Ireland is ranked 7th out of the 27 EU member states in road fatalities per million population. The purpose of this 3-year study is to identify the environmental, road and human factors that are associated with fatal/serious multi-vehicle road traffic collisions on national primary and secondary routes. Interim results are presented here.

Methods

Fatal/serious injury data for each national route were obtained for 1996-2006. Multilevel logistic regression modeling was employed with injuries (n=44,783 with fatal/serious injuries = 4,977) nested within collisions (n=14,508) nested within routes (n=70).

Results

Results (as OR; 95% CI) indicate increased risk for persons aged over 64 years (3.8; 2.9-5.1). Vehicle passengers are more likely to be fatally/seriously injured than drivers (1.4; 1.21-1.6). Male occupants are less likely to be fatally/seriously injured than females (0.5; 0.5-0.6). Fatal/serious injuries are less likely to result from rear-end (0.1; 0.06-0.1) than head-on collisions. Goods vehicles are protective in comparison to cars (0.17; 0.13-0.22). A trend of increasing risk is associated with increasing speed limits as roads with a speed limit of 100km/h were more likely to result in a fatal/serious injury than roads with a speed limit of 50km/h (6.2; 4.0-9.5). A decreasing trend was associated with year. The top five routes for fatalities/serious injuries were the N7, N25, N2, N4 and N11.

Conclusion

Results from this study yield insights into multi-vehicle road traffic collisions that may lead to the identification of counter-measures. Our research continues with the examination of single vehicle and pedestrian road traffic collision types and identification of accident clusters or “hot spots”.
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<td>12.00</td>
<td>Halting the development of conduct problems in Ireland: Evaluating the effectiveness of the <em>Incredible Years Parent and Teacher training series</em> within a ‘high risk’, community-based setting</td>
<td>Convenor: Dr Sinead McGilloway NUI Maynooth</td>
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Title: Halting the development of conduct problems in Ireland: evaluating the effectiveness of the Incredible Years Parent and Teacher training series within a ‘high risk’, community-based setting.

Symposium consisting of four papers

Convenor: Dr Sinead McGilloway, NUI Maynooth

Introduction

Conduct problems in childhood are prevalent in Ireland and place affected children at increased risk of early school leaving, alcohol and substance abuse and antisocial and criminal behaviour in adolescence and adulthood. A number of researchers and policy makers argue that early childhood intervention, such as parent training and teacher training programmes, may change the maladaptive path associated with early onset conduct problems. The research literature also highlights the increased need for evidence-based support to be delivered at a community level for ‘at risk’ children.

The aim of this symposium is to examine the delivery of parent and teacher interventions in a community setting for children at risk of conduct problems. The first paper presents the findings of a pragmatic randomized controlled trial carried out as part of a national evaluation of the Incredible Years BASIC parent training programme (IYP) in Ireland. Paper two presents the findings from a qualitative analysis of parents’ participation in the IYP, with a view to understanding the key mechanisms of change by which such interventions are effective and to explore the cultural, personal and environmental challenges involved in programme participation. The third paper outlines the results of a randomized controlled trial of the Incredible Years Teacher Classroom Management (IY TCM) programme in Ireland. Finally, in paper four, teachers’ experiences of dealing with conduct problems in the classroom, and their experiences of the IY TCM intervention are explored. Collectively, these papers demonstrate the effectiveness of evidence-based interventions that are implemented at a community level in order to tackle childhood conduct problems, as well as highlighting the key challenges involved in programme participation.
Symposium: Halting the development of conduct problems in Ireland: evaluating the effectiveness of the Incredible Years Parent and Teacher training series within a ‘high risk’, community-based setting

Title: Paper 1: Preventing conduct problems in disadvantaged communities: a randomised controlled trial to investigate the effectiveness of the Incredible Years Basic Parent Training Programme in an Irish context.

Authors: Sinéad McGilloway\textsuperscript{1}, Tracey Bywater\textsuperscript{2}, Grainne Ni Mhaille\textsuperscript{1}, Catherine Comiskey\textsuperscript{3}, Yvonne Leckey\textsuperscript{1}, Paul Kelly\textsuperscript{1} and Michael Donnelly\textsuperscript{4}

Organisation: \textsuperscript{1} National University of Ireland, Maynooth \textsuperscript{2} Bangor University, Wales \textsuperscript{3} University of Dublin, Trinity College \textsuperscript{4} Queen’s University, Belfast

Objectives

To assess the efficacy of the Incredible Years BASIC parenting programme (IYP) in reducing conduct problems in childhood and improving parent well-being and competencies within an Irish context. The IYP programme is a brief, group-based intervention guided by behavioural and social-learning theory principles. Considerable research \cite{1, 2} suggests that the IYP significantly improves parent-child interactions and child behaviour outcomes. However, more research is needed to establish the effectiveness and cross-cultural utility of the programme.

Methods

This study was a pragmatic randomized controlled trial (RCT) of the IYP programme for children aged 3-7 years with persistent conduct problems. The principle inclusion criterion was that parents had a child who scored above the clinical cut-off point on the Eyberg Child Behaviour Inventory (ECBI). One hundred and forty-nine families were randomly allocated on a 2:1 ratio to an intervention group (n=103) or a waiting list control group (n=46). Child behaviour and parent competency and well-being were assessed at baseline and six months later using various measures, including standardised psychometric inventories and independent observations. An intention to treat analysis was carried out using analysis of covariance (ANCOVA) to examine post-intervention differences between groups.

Results

Statistically significant reductions in problem child behaviours and improvements in pro-social behaviour were found. A similar positive effect on parental health and well-being was also found. Critical parenting was also significantly reduced at follow-up.

Implications

The results indicate that a group-based parenting intervention can significantly improve child behaviour and promote parent competencies and well-being.
Symposium: Halting the development of conduct problems in Ireland: evaluating the effectiveness of the Incredible Years Parent and Teacher training series within a ‘high risk’, community-based setting

Title: Paper 2: How and why does the Incredible Years Parenting Programme work? A qualitative analysis of Irish parents’ experiences within a ‘high risk’ context.

Authors: Mairead Furlong and Dr. Sinead McGilloway
Organisation: National University of Ireland, Maynooth.

Objectives

Controlled trials demonstrate that parenting programmes work, but less is known about the processes of change or intervention mechanisms. This study assessed the experiences of Irish parents involved in a randomised controlled trial of the Incredible Years BASIC parenting programme (IYP), with a view to understanding how and why the programme works, or does not work, within a ‘high risk’ disadvantaged setting.

Methods

Data from 33 parents of children (aged 3-7 years) with conduct problems were collected by semi-structured interviews at six month follow up. Participants were recruited using a purposive sampling method and the interviews were analysed using constructivist grounded theory.

Results

Key themes included: (1) perceived mechanisms of change (e.g. learning positive parenting skills and gaining non-judgemental support from the group); (2) cultural, personal and environmental challenges in learning the new skills (e.g. discomfort with principles of praise and positive attention, conflict with partner, parenting within an antisocial environment)); and (3) experiences of parents who dropped out of the course.

Implications

These findings provide important insights into Irish parents’ experiences of the IYP and highlight aspects of the programme that were viewed positively by parents as well as those that were more challenging. The findings should help to inform the future implementation of the programme both within and outside Ireland.
Symposium: Halting the development of conduct problems in Ireland: evaluating the effectiveness of the Incredible Years Parent and Teacher training series within a ‘high risk’, community-based setting


Author: Sinead McGilloway¹, Lynda Hyland¹, Anne Lodge², Tracey Bywater³, Grainne Ni Mhaille¹, Yvonne Leckey¹, Paul Kelly¹, Catherine Comiskey⁴, and Michael Donnelly⁵.

Organisation: ¹ National University of Ireland Maynooth  
² Church of Ireland College of Education  
³ University of Bangor, Wales  
⁴ University of Dublin, Trinity College  
⁵ Queen’s University, Belfast

Objectives

To assess the effectiveness of the Incredible Years Teacher Classroom Management (IY TCM) programme in improving teacher competencies to manage challenging behaviour in an Irish classroom setting. The IY TCM is a group-based intervention designed to help teachers promote prosocial behaviour and manage disruptive behaviours more effectively. Existing research [3, 4] strongly supports its effectiveness in improving teacher skills and pupil behaviour.

Methods

This study involved a randomised controlled trial (RCT) of the IY TCM programme which examined the effectiveness of the intervention in a sample of Irish primary schools. Eleven schools, 22 teachers and 234 children aged 4 to 7 participated in the RCT. Half the teachers were randomly allocated to an intervention group with the remainder to a waiting-list control group. Classroom observations and standardised psychometric measures were used to assess teacher and child behaviour at baseline and six months later.

Results

Preliminary results from robust regression models indicate improvements in teacher classroom management strategies and overall classroom environment. Teachers who received the training showed more positive and fewer negative teaching strategies than those in the control group. Significant declines were also observed with respect to social, emotional and behavioural difficulties amongst children in the intervention group.

Implications

The findings support the effectiveness of the IY TCM programme as an effective intervention for teachers facing behavioural challenges in the classroom. Evidence further suggests that the programme can lead to general improvements in the classroom environment.
Symposium: Halting the development of conduct problems in Ireland: evaluating the effectiveness of the Incredible Years Parent and Teacher training series within a ‘high risk’, community-based setting

Title: Paper 4: Examining the impact of the Incredible Years Teacher Classroom Management Programme on the experiences of primary school teachers: a qualitative analysis.

Authors: Lynda Hyland\textsuperscript{1}, Sinead McGilloway\textsuperscript{1} and Anne Lodge\textsuperscript{2}

Organisation: \textsuperscript{1}National University of Ireland Maynooth
\textsuperscript{2}Church of Ireland College of Education

Objectives

Conduct problems in children can pose significant challenges for teachers in the management of classroom behaviour. This research was undertaken in a region of Ireland undergoing significant social regeneration efforts. The study aimed to: (1) explore teacher beliefs regarding the classroom management of children aged 4 to 6 years, many of whom were from disadvantaged backgrounds and (2) to examine the experiences of a small number of teachers who participated in the Incredible Years Teacher Classroom Management (IY TCM) programme.

Methods

This research involved a process evaluation sub-study, nested within a randomised controlled trial of the IY TCM programme in Ireland. Purposive sampling was used to select participants. Semi-structured interviews were carried out with teachers at baseline (n=10), and at six month follow-up (n=5). Data were analysed using a standard thematic analysis.

Results

Emergent themes from the baseline data included teacher stress and perceived lack of control in the classroom. Key themes identified from post-intervention data include empowerment of teachers and perception of improved teacher-class relationships. Overall, teachers felt that the training led to an improvement in classroom atmosphere and a reduction in disruptive behaviour in the classroom.

Implications

Teachers frequently report problems in classroom management as a significant stressor in their working lives. The findings suggest that, by providing structured training, teachers felt empowered in their role as educators and reported improved relationships with pupils. Further analysis will explore the long-term efficacy of IY TCM programme for teachers in managing emotional and behavioural difficulties in the classroom.
Symposium: Halting the development of conduct problems in Ireland: evaluating the effectiveness of the Incredible Years Parent and Teacher training series within a ‘high risk’, community-based setting

References:


# Session 3  2.15 pm – 3.00 pm

**Chair:** Dr John Devlin  
**Department of Health and Children**

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<td>Keep taking the tablets: Prescription information as an indicator of Northern Ireland’s mental health</td>
<td>Ms A Maguire QUB</td>
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<td>2.30</td>
<td>Who takes slimming pills in Northern Ireland?</td>
<td>Dr Lynsey Patterson QUB</td>
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<td>2.45</td>
<td>Review of Health Impact Assessment (HIA) in Ireland</td>
<td>Ms Claire Higgins IPH</td>
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<td>3.00</td>
<td>The health benefits of improvements to the physical environment</td>
<td>Ms Mary Lynch QUB</td>
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Awareness of mental health in Northern Ireland is increasing with reports suggesting that as many as 1 in 4 of the population are suffering from depression at any one time (AWARE). Accurate information on population mental health is scarce. Prescribing data collated by the Business Services Organisation (BSO) in 2008 showed that Antidepressants were the third most prescribed drug in Northern Ireland with other psychiatric drugs, Hypnotics and Anxiolytics, ranked as sixth. The cost of Northern Ireland’s declining mental health is escalating and so a greater understanding of the factors affecting psychiatric ill health is necessary to effectively treat the population. This study uses the unique Electronic Prescribing and Eligibility System (EPES) to identify individual and area factors that affect the uptake of Anxiolytic and Antidepressant drugs, and to assess how much of the variation in drug prescribing is due to factors operating at G.P. practice level.

Methods

Population-wide prescription information for the year April 2009 - April 2010 was analysed using SPSS17. Age and sex were identified as per health card registration and a number of area level measures were linked to individual’s super output area. Practice area level information and characteristics were also added by BSO. Data were anonymised and made available for research. Descriptive analyses and logistic regression was carried to be followed by multilevel modelling to control for practice level variation.

Results

Analyses shows that approximately 12% of the N.I. population were prescribed anti-depressants (BNF cat 4.3) during the one year time period and almost 6% anti-anxiety drugs (BNF cat 4.1.2). Overall, women were twice as likely than men to receive either drug with almost a quarter of all women aged over 50yrs being prescribed an antidepressant. Regression analyses showed the probability of receiving either an antidepressant or an anxiolytic drug in the most deprived quintile is twice that of those living in the most affluent areas (OR 1.93 (95% CI 1.53, 2.43) and OR 2.08 (95% CI 1.53, 2.83) respectively). Urban/Rural variation was non-significant.

Conclusions

This study demonstrates the efficacy of EPES in pharmaco-epidemiological research. Targeting deprivation should be key in policy makers’ agendas. Further analyses will include linking this data with census level data from the Northern Ireland Longitudinal Study.
Obesity is a global issue and is evident locally where approximately 24% of adults are considered obese. In an attempt to find the ‘magic bullet’ a number of anti-obesity drugs have been produced. In recent years trends have shown increased prescribing of anti-obesity medication in general practice with a concomitant increase in cost, yet little is known about who is getting them. This study aims to describe the patient and practice-level variation in consumption and prescribing of anti-obesity medication in Northern Ireland.

Methods

NI’s unique electronic prescribing and eligibility system (EPES) was used to examine all prescriptions issued between April 2009 – March 2010 for non-institutionalised individuals aged 15 years and over. Patient’s age and sex were as per the health-card registration; socioeconomic status was estimated from area of residence. Practice level-characteristics such as median GP age and male/female ratio were added. Descriptive analyses were followed by logistic regression and multilevel modelling to control for practice level effects.

Results

During April 2009 – March 2010 approximately 5000 individuals/month were prescribed an anti-obesity medication. Females are almost three times as likely to be prescribed an anti-obesity medication; their peak age of consumption was 30 – 44 compared to 50-64 years for males. Overall, 8% of people on anti-diabetes medication were on an anti-obesity medication and approximately 17% of the people on an anti-obesity medication were on an anti-diabetes medication. Variations in prescribing according to deprivation and GP practice are evident and have several possible explanations related to the ascertainment and management of obese patients from different social backgrounds and to the practice "style" of their General Practitioners.

Conclusion

This study demonstrates the utility of EPES for pharmaco-epidemiology. Further work will link prescribing data to the Northern Ireland Longitudinal Survey (NILS).
Title: Review of Health Impact Assessment (HIA) in Ireland

Authors: Claire Higgins, Teresa Lavin
Organisation: Institute of Public Health in Ireland
Contact: Ms Claire Higgins, email: claire.higgins@publichealth.ie

Background

In 2009 the Institute of Public Health in Ireland (IPH) undertook a review of HIA in Ireland. This was a follow up to a baseline study of HIA in Ireland conducted by the IPH in 2001 which indicated that HIA knowledge throughout Ireland was relatively limited and that there was ‘little knowledge of HIA as a term or concept outside of a core group of organisations and workers engaged in high-level policy and service development’. This presentation will provide an overview of the study and outline recommendations and action plan to further HIA work across Ireland.

Method

Research for the review was undertaken by assessing policy position papers, conducting a questionnaire administered to training programme participants and stakeholder interviews. The terms of reference for the review included:

- Detail progress and achievements of HIA for the period 2001 to 2009
- Assess current levels of awareness and activity
- Provide suggestions for the direction of future work.

Results

Responses to the training programme participant questionnaire, the assessment of support materials and activities carried out, and consultations with key stakeholders, have all indicated that IPH has had a substantial impact in relation to:

- Developing appropriate HIA tools and guidelines
- Promoting the use of these
- Providing appropriate training and capacity building
- Providing follow-up support
- Providing networking opportunities
- Raising the awareness of HIA and
- Conducting HIAs.

Consultations with key stakeholders indicated that IPH work in this area has established IPH as the primary provider of HIA support services and advocacy in the South as well as (with the possible exception of Belfast Healthy Cities in the greater Belfast area and Ards) in the North.

The main findings emanating from this review emphasise the need for a triadic approach to enhancing HIA throughout the island of Ireland in future. Firstly, the process needs to be streamlined; secondly, appropriate capacity-building needs to be provided; and thirdly, there needs to be the political will, at the highest level, to support the implementation of these developments.

Conclusion

This presentation will present the findings contained in this review provide and comment on how IPH is attending these.
The purpose of the study is to assess how much society is willing to pay to improve neighborhood characteristics to stimulate society to reach the recommended amount of 30 minutes of physical activity 5 days a week.

Methods

Data was collected from a sample of 264 individuals aged 18+ living in Northern Ireland, by means of a self administered questionnaire during January-May 2010. We use stated preferences to elicit the amount of physical activity that respondents are willing to do on a weekly basis under (i) current physical environment characteristics, and (ii) improved physical environment characteristics of the area where they live. We then use a payment ladder Contingent Valuation question to assess how much respondents are willing to pay for the improvements to the physical environment of their neighborhood. We use an interval data accelerated-life Weibull model to explain respondent’s willingness to pay as a one-off tax for improvements in the physical environment with respondents’ socio-economic characteristics and with the level of physical activity that respondents expect to do under current and improved characteristics of the physical environment. We assess how much the public values the health benefits of the recommended amount of 30 minutes of physical activity 5 days a week by predicting the willingness to pay of respondents who state that they do not plan to do any physical activity under current conditions, but plan to meet the recommended target for physical activity under improved characteristics of the physical environment.

Results

We find that on average respondents are willing to pay 50.81 GBP (s.e. 5.46) to improve the characteristics of the physical environment where they live in. When we focus on respondents that do not currently do any physical activity but that under improved characteristics of the physical environment are willing to do the recommended 30 minutes of physical activity 5 days a week, their willingness to pay for the improvements in the characteristics of the physical environment is 55.33 GBP (s.e. 8.33). The public values 6.25 GBP (s.e. 3.05) the health benefits associated with improvements in the physical environment.

Conclusions

Research based on stated preferences shows that interventions aimed at improving the characteristics of the physical environment leading to increased physical activity are supported by the public. Policymakers should be aware that the benefits in terms of increased levels of physical activity that the public perceives from improvements in the physical environment are substantial.
## Session 4  3.45 pm – 4.30 pm

**Chair:**  Prof Cecily Kelleher  
**University College Dublin**

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<td>The relationship between early breastfeeding exposure and children’s educational test scores at nine years of age using the Growing Up in Ireland data</td>
<td>Dr Cathal McCrory ESRI</td>
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<td>4.00</td>
<td>Social structure and mental health: does where you live really matter? A secondary analysis of Northern Ireland survey data</td>
<td>Ms A Maguire QUB</td>
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<td>4.15</td>
<td>Why do cancer patients die in hospital? A retrospective study by note review</td>
<td>Dr Janine Blaney NI Cancer Registry</td>
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<td>Sole and joint registration status at birth and their relationship to low birthweight in NI 1991-2002</td>
<td>Dr Karen Casson Ms Evie McCrum-Gardner UU</td>
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The relationship between early breastfeeding exposure and children’s educational test scores at nine years of age using the Growing Up in Ireland data.

Dr. Cathal McCrory, Dr. Richard Layte

The Economic and Social Research Institute, Dublin.

Dr Cathal McCrory, ESRI, Dublin

Background

Numerous studies have shown that children who were breastfed in infancy score more highly on tests of cognitive ability than children who were not breastfed (e.g. Anderson, Johnstone & Remley, 1999). What is less clear however is whether breastfeeding represents a direct nutritional advantage of breastfeeding over artificial feeding or is simply an artefact of other socio-economic or environmental factors. This retrospective cross-sectional study uses data from the first wave of the Growing Up in Ireland study to examine the relationship between early breastfeeding exposure and children’s academic test scores at nine-years of age independent of a wide range of possible confounders.

Method

The sample comprised 8,568 nine-year-old school-children participating in the Growing Up in Ireland study. Information relating to breastfeeding initiation and exposure duration was elicited during the course of the household interview via parental recall an children’s academic performance at nine-years of age was assessed using the Drumcondra Primary Reading and Mathematics tests. Hierarchical regression analysis with robust estimators was used to quantify the independent effect of breastfeeding on children’s test scores.

Results

In unadjusted analysis, children who were ever breastfed scored 8.7 percentage points higher on reading and 7.5 percentage points higher on mathematics compared to those who were never breastfed. While the breastfeeding advantage attenuated appreciable in multiple adjustment, children who were breastfed during infancy continued to enjoy a 3.3 percentage points advantage in reading and 2.3 percentage point advantage in mathematics relative to those who were never breastfed. Moreover, there was some suggestion that the effect might be dose-dependent.

Conclusions

Independent of a wide range of confounding variables, there was a significant effect of breastfeeding on children’s academic test scores. Possible explanations for the breastfeeding advantage and methodological limitations will be discussed.
Title: Social structure and mental health: does where you live really matter? A secondary analysis of Northern Ireland health survey data

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Background

Social Fragmentation is based on Durkheim’s century old idea of ‘anomie’ and refers to the idea that isolation and disorganisation within an area influence individual’s health. Some, but not all, studies have shown fragmentation to be related to suicide and parasuicide risk, higher GHQ12 scores and higher admission rates for psychoses. The aim of this study is to determine if fragmentation *per se* affects mental health or if the association is due to other factors relating to fragmented areas.

Methods

A measure of social fragmentation was constructed from four census variables (as per Condgon, 1996) for each of the 890 super-output areas in Northern Ireland (avg pop. 1, 900). These were divided into quintiles and added to the 2005 Health and Social Wellbeing Survey (HSWB) as a contextual variable. Respondent characteristics known to be associated with mental health were included such as; age and sex, marital status, perceived social support, socio-economic status (based on car availability and housing tenure) and health status (based on limiting longstanding illness (LLTI)). A GHQ-12 score of 4 or more was taken to be indicative of significant psychological ill health. Logistic regression analysis was restricted to 3,306 people aged 25-74 years.

Results

As expected, people in the most fragmented quintile were more likely to be unmarried, have a severe lack of social support, live in rented accommodation and were more likely to have a significant psychological disorder (OR=1.79, 95%CI 1.35, 2.36), after adjusting for age and sex. Although levels of perceived social support were strongly associated with GHQ12 score, adjustment for these factors did not significantly affect the likelihood of poor mental health across fragmentation quintiles (OR=1.51, 95% CI 1.13,2.01). However, adjustment for SES and LLTI completely eliminated the association between social fragmentation and psychological ill health.

Conclusions

Social Fragmentation is associated with poor mental health, but only because these areas tend to be more deprived. After adjustments are made for SES, social fragmentation has no association with the likelihood of psychological disorder. It’s who you are not where you live that determines mental health. However, before we completely sound the death knoll for social fragmentation we should take into consideration the recognised imperfections of the construct and modify it. Until then, policies to improve mental health should focus on reducing individual poverty and material disadvantage rather than changing the character of areas.
Title: Why Do Cancer Patients Die in Hospital? A Retrospective Study by Note Review.

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Background

Despite the widely acknowledged fact that the majority of cancer patients would prefer to die at home, latest figures for Northern Ireland show that most die in hospital, with only 34% achieving a home death.

Methods

To ascertain the most likely factors that influence and contribute to a hospital death, a retrospective note review of all cancer patients that died within an acute hospital setting (July – December 2007) was undertaken.

Results

Within the study timeframe a total of 695 (53% Male) cancer patients, average age 72 years, died in an acute hospital. Most had been referred by a GP (53%) as an emergency (79%), with urgent physical (54%) or cancer-related symptoms (33%), and only 32% had palliative care involvement at home. Just over one quarter of the patients were diagnosed on their last admission. The average hospital stay was 11 days, however 14% died within 48 hours of admission. While 93% of deaths were anticipated, preferred place of death was only recorded for 41% of patients, with 61% indicating a preference for home. The Liverpool Care Pathway (LCP) was in place for 56% of patients but varied considerably by trust. In general, findings suggest that there was no inappropriate use of investigations, interventions or treatment.

Conclusions

While the late presentation of those diagnosed on their last admission do account for 26% of the sample, findings suggest that palliative care services could be improved across all care settings. Appropriate healthcare professional training to ensure the timely identification of the dying patient and implementation of appropriate end of life care pathways, as well as the recording of preferred place of death, may facilitate an individual’s preference to die at home. Since this data relates to 2007, it will act as a benchmark for future work in this area.
The literature often examines the differences in adverse pregnancy outcomes between married and unmarried mothers. A Targeting Social Need (TSN) project investigated socioeconomic differences in adverse pregnancy outcomes in births in NI 1992-2002. Social research has shown that a higher proportion of mothers not in a co-residential partnership in NI were ‘closely involved’ with the father at the time of the birth than in other countries of the UK (Kiernan & Smith, 2003). A current project is using the Northern Ireland Longitudinal Study (NILS) dataset to investigate potential ‘clusters’ of unmarried registrants, defined by socioeconomic and household characteristics, including the level of social support in the form of the household members.

Methods

The TSN project used routinely collected data: Registrar General and Child Health System. Deprivation indices for small areas were linked into the matched dataset via the postcode of residence at birth. Statistical analysis was undertaken using Poisson regression. A sample of 28% of the Northern Ireland population are NILS members. Our NILS dataset is based on babies born between May 1999 and April 2002 who are NILS members or whose mum and/or dad are NILS members. Registrar General birth data are linked to 2001 census person and household data and Noble deprivation indices.

Results

Analysis of the TSN project has shown that distinguishing unmarried mothers as three separate groups on registration status – sole registrants, cohabiting registrants and joint registrants with the mother and father living at a different address – differentiates the risk profile within unmarried categories (Dolk et al., 2008). Compared to married mothers, sole registrants, cohabiting registrants and joint registrants living at a different address from the father have an increased risk of low birthweight: IRR 1.46 (1.36-1.56), IRR 1.41 (1.31-1.52), IRR 1.39 (1.29-1.49) respectively. After controlling for deprivation, maternal age and multiple birth the adjusted relative risks were 1.50 (1.39-1.63), 1.49 (1.38-1.61) and 1.45 (1.33-1.56) respectively.

Analysis of the NILS dataset showed that just over four in ten sole registrants were living in a household with more than one adult at the time of the census; at least 3 in 10 were living with one or both of the baby’s grandparents. Fifty-six per cent of joint registrants living at a different address from the father at the time of the birth were living in a household with more than one adult at the time of the census.
Conclusion

Compared with married mothers, unmarried mothers have a 40% higher risk of having a low birthweight baby. Ongoing analysis will investigate whether household composition is an explanatory variable in the risk of low birthweight and preterm birth.

References
