The Advocacy in Action Study

Safety 2010 Conference

Professor Ronan Lyons Centre for Health Information, Research and Evaluation (CHIRAL) Institute of Life Science School of Medicine Swansea University



School of Medicine Swansea University

- Childhood pedestrian deaths/injuries inequalities
- UK performs poorly on child pedestrian injuries
- Variety of effective interventions available
- Many interventions not implemented
- Previous study suggested that local politicians influential
- Development of a cluster randomised intervention trial



To determine whether the safety of vulnerable pedestrians can be improved in deprived areas by an advocacy package, designed to influence local elected councillors to take action in the areas they represent.

Vulnerable pedestrians: aged <16 or 60+



1: To identify areas which are deprived and have high vulnerable pedestrian injury rates and to identify the councillors representing those areas.

2: To develop an information and advocacy package aimed at influencing councillors to take action to enhance local pedestrian safety measures.

3: To undertake a cluster randomised controlled trial to test the effectiveness of the advocacy package in improving road safety.

4: To explore factors related to the success or failure of the intervention.



Methods

- Mixed methods study with embedded cluster RCT at 4 centres: south Wales, Bristol, Nottingham, Surrey
- 617 councillors, from 239 wards (deprived, with high pedestrian injury rates) from 57 district councils
- Large scale GIS analysis: STATS19 and OSMM layers
- Development of intervention packs (postal)
- Telephone reinforcement
- Questionnaire (councillors, teachers, RSOs), interview and GIS follow up

• Statistical analysis: Blinded to allocation. Two-level log-binomial generalised estimating equations were used to estimate relative risks accounting for clustering by district council.

Chiral Centre for Head Information - research - evaluation

School of Medicine Swansea University

Example of map of casualty locations





Swansea University

Example of traffic calming distribution



Results

Short term outcomes:

- Increased interest RR 1.09 (1.03-1.16)
- Belief could take action RR 1.36 (1.16-1.61)
- Pedestrian safety action
- Councillor involvement at 18 months 63%
- Longer term outcomes: •
 - Difference % Road traffic calmed 0.07 (-0.07-0.20)
 - 20mph zones
 - Safe Routes to School
 - Pedestrian Training

RR 1.47 (0.93-2.32)

RR 1.55 (1.19-2.03)

RR1.34 (0.83-2.17)

RR 1.23 (0.95-1.61)

Ochira School of Medicine Swansea University

Discussion

- Overall disappointing results
- No significant increase in safety on ground
- Positive findings on intent and engagement
- Numerous barriers:

Ochira

- many others involved in decision making/prioritisation
- long time scale to implement change
- some were resistant
- Future: put information into public domain
- Proposal to develop SafeArea website within IOBI
 - <u>www.injuryobservatory.net</u>

School of Medicine Swansea University

Acknowledgements

Principal Investigators:

R A Lyons¹, D Kendrick², E M Towner³, C Coupland², M Hayes⁵, N Christie⁴

Significant Contributors:

M Brussoni³, L Groom², S Jones⁶, R Kimberlee⁷, S Macey¹, C Mulvaney², SE Rodgers¹, T Sarvotham¹, J Sleney³, S Smith², J Stewart⁸, S Turner¹, Y. Vinogradova².

1 School of Medicine, Swansea University

2 Division of Primary Care, Nottingham University

3 Faculty of Health and Social Care, University West of England Bristol

4 Robens Centre for Public Health, University of Surrey

5 Child Accident Prevention Trust, London

6 Department of Primary Care and Public Health, Cardiff University

7 Faculty of Life Sciences, University of the West of England, Bristol

8 Nottinghamshire County Teaching PCT

Ochira School of Medicine

Swansea University