

Institution: Swansea University		
Unit of Assessment: UoA3		
Title of case study: Informing and influencing a multi-stranded national approach to mental health, suicide, and self-harm prevention		
Period when the underpinning research was undertaken: 2009-2018		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g., job title):	Period(s) employed by submitting HEI:
Professor Ann John	Clinical Professor	2004-present
Professor Keith Lloyd	Clinical Professor	2004-present
Professor Ronan Lyons	Clinical Professor	1994-present
Professor David Ford	Professor	1992-present
Period when the claimed impact occurred: 2014-2020		
Is this case study continued from a case study submitted in 2014? No		
1. Summary of the impact		
<p>Research evidence generated by Swansea University, including the creation, curation and analysis of the first suicide-information database for Wales, has shaped the development of a multi-stranded national approach to prevent suicide and self-harm. Swansea research has:</p> <ul style="list-style-type: none"> • Driven national policy changes at government level • Prompted additional investment in prevention resources such as an additional GBP500,000/year to support national and regional approaches to preventing suicide and self-harm and dissemination of guidance to all school in Wales of self-harm guidance. • Positively influenced media coverage of suicide and self-harm with researchers working with UK government agencies, Samaritans, BBC, ITV and Channel 4. • Informed new evidence-based suicide prevention guidance for schools, social care and health services. • Influenced revised guidelines for firearms licensing, prescription of anti-depressants and bridge design. These guidelines to reduce access to the means of suicide have also been shared UK-wide, • Been adopted internationally, Canada. 		
2. Underpinning research		
<p>Globally, 800,000 people take their own lives each year; in Wales and across the UK, the numbers of suicides each year are approximately 350 and 6000, respectively. Suicide is a tragedy for all concerned and a cause of distress for many people, including family, friends, colleagues, professionals and the community at large. In 2008, the issue of suicide came to prominence in Wales due to an apparent cluster of suicides in young people in the Bridgend area of South Wales. The sensationalism of the extensive national and international newspaper coverage provoked controversy over the size, initiation, maintenance, and cessation of this cluster, culminating in the local police holding a press conference in February 2008 to hold the media to account.</p> <p>To establish the true extent of the problem amid the sensationalised accounts, in 2013, Professors John and Lloyd aimed to determine whether a statistically definable cluster had occurred and were the first and only research team to do so. By analysing mortality data over 10 years across Wales (a population of 3.2 million), the researchers used novel temporo-spatial statistical analysis to produce evidence of the existence of a suicide cluster among 15- to 35-year-olds around the time of the media attention. However, this apparent cluster was smaller, shorter in duration and predominately later than the phenomenon that was widely reported (R1, G1). The team examined the quality and sensationalism of media articles on suicide in Bridgend for six months before and after the defined cluster (June 26, 2007, to</p>		

September 16, 2008) using, a tool based on guidance of the responsible reporting of suicide they had developed and published previously (**R2**). In all, 577 newspaper articles were identified, almost half displayed a high level of poor-quality and sensationalist reporting during the timescale of the suicide cluster. Notably, there was extensive republishing of photos from previous deaths, nearly half of the reports referred to earlier suicides (meaning that each suicide was repeatedly reported in the press) and approximately one in seven articles mentioned the method of suicide in the headline, which contravened reporting guidance (**R2**). The research highlighted the necessity for improved knowledge of the characteristics of those who die by suicide, the risk factors for suicide and patterns of healthcare contacts to better identify and support those at risk of taking their own lives.

Building on their work using routinely collected data relating to suicide clusters, funded by Health and Care Research Wales, the research group at Swansea developed and established a new database, **Suicide Information Database-Wales (SID-Cymru)**, in 2014 (**R3**). The largest database of its kind and an important resource in facilitating research on suicide, it accesses and links information on prior health, the nature of previous contacts with services, and wider social circumstances for all those who die by suicide (whether known or unknown to mental health services) within the population of Wales using anonymised routinely collected electronic data in healthcare (primary, emergency department and secondary) and social datasets from the Secure Anonymised Information Linkage (SAIL) Databank (<http://www.saildatabank.co.uk>) (**R4, G6**). The architects of the SAIL databank (Professors Lyons and Ford) were involved in the curation of the data and the associations with SID Cymru. This database was the first to allow access to linked routinely collected electronic data about all persons in Wales over 10 years of age who were recorded to have died by suicide, enabling “big data” analysis of suicide antecedents and service use (**R4**). Professor John led the analysis of data from primary care providers, hospitals, emergency departments and schools along with evidence synthesis to explore key risk factors for suicide identified in SID-Cymru– such as depression, alcohol and self-harm with a focus on young people (**R5, R6, R7**).

3. References to the research

All papers represented below are published in peer reviewed journals. All have been supported by NISCHR funding (**R1** and **R2, R3, R7**), MQ/ADP (**R4**) and HCRW (**R6**). **R1** was submitted to REF2014. **R2** is cited in NICE policy. **R4** is cited by the UK government on 21 Mar 2013 in the Independent Caldicott review, information governance in the health and care system. **R6** is cited by World Happiness Report (APO) and UK government’s Research into Platforms’ Operating Models and Management of Online Harms.

R1. Jones P, Gunnell D, Platt S, Scourfield J, **Lloyd K**, Huxley P, Kamran B, **John A**, Wells C, Dennis M. (2013). Identifying probable suicide clusters in Wales using national mortality data. *PLoS ONE* 8(8): e71713. doi: 10.1371/journal.pone.0071713.

R2. **John A**, Hawton K, Gunnell D, **Lloyd K**, Scourfield J, Jones P, Luce A, Marchant A, Platt S, Price S, Dennis M. (2017). Newspaper reporting on a cluster of suicides in the UK crisis: A study of article characteristics using PRINTQUAL. *Crisis* 38(1):17-25. doi: 10.1027/0227-5910/a000410.

R3. **John A**, Dennis M, Kosnes L, Gunnell DG, Scourfield J, **Ford DV**, **Lloyd KR**. (2014). Suicide Information Database-Cymru: A protocol for a population-based, routinely collected data linkage study to explore risks and patterns of healthcare contact prior to suicide to identify opportunities for intervention. *BMJ Open* 4(11). doi: 10.1136/bmjopen-2014-006780.

R4. **Lyons RA**, Jones KH, John G, Brooks C, Verplancke J-P, **Ford D** et al. (2009). The SAIL databank: Linking multiple health and social care datasets. *BMC Med Inform Decis Mak* 9:3. doi:10.1186/1472-6947-9-3.

R5. Marchant A, Turner S, Lloyd B, Peters P, Williams D, **Lloyd K**, **Lyons R**, **John A**. (2019). Self-harm presentation across healthcare settings by sex in young people: An e-cohort study using routinely collected linked healthcare data in Wales, UK. *Arch Dis in Childhood* 105(4). doi: 10.1136/archdischild-2019-317248.

R6. John A, Glendenning AC, Marchant A, Montgomery P, Stewart A, Wood S, **Lloyd K,** Hawton K. (2018). Self-harm, suicidal behaviours, and cyberbullying in children and young people: Systematic review. *Journal of Medical Internet Research* 20(4): e129. doi: [10.2196/jmir.9044](https://doi.org/10.2196/jmir.9044)

R7. John A, Marchant A, Fone D, McGregor J, Dennis M, Tan J, & **Lloyd, K.** (2016). Recent trends in primary-care antidepressant prescribing to children and young people: An e-cohort study. *Psychological Medicine* 46(16):1-13. doi: 10.1017/S0033291716002099.

Grants supporting the underpinning research at Swansea University:

G1. NISCHR (Reference SC09/06), £196,000, PI A John.

G2. NISCHR (Reference RFS-12-25), £236,104, Jan 2012-Dec 2015, PI A John.

G3. HCRW (Reference SC-14-11), £66,000, Oct 2014- Mar 2019, PI A John.

G4. MQ: Transforming Mental Health (Reference MQBF/3 ADP), £799,961, Apr 2018- Mar 2021, PI A John.

G5. Wolfson Foundation (Reference JHR-1261) £10,000, PI A John.

G6. SAIL Databank Farr Institute of Health Informatics Research. The Farr Institute is supported by a consortium of ten UK research organizations: Arthritis Research UK, the British Heart Foundation, Cancer Research UK, the Economic and Social Research Council, the Engineering and Physical Sciences Research Council, the Medical Research Council, the National Institute of Health Research, the National Institute for Social Care and Health Research (Welsh Government) and the Chief Scientist Office (Scottish Government Health Directorates). MRC Grant No: MR/K006525/1.

4. Details of the impact

Driving policy change

The work of the Swansea group in the design, development and use of SID-Cymru (**R3**) represents the first use of anonymised, routinely generated real-life data on the population of Wales. Data from SID-Cymru directed the Welsh Government's suicide prevention strategy for Wales (2015-2020), 'Talk to Me 2', launched in June 2015. The then Minister for Health and Social Services thanked Professor John in the strategy foreword ***"for her leadership of the National Advisory Group, and its work to develop Talk to Me 2. I commend the strategy and action plan and anticipate further improvements in the months and years to come"*** (**C1**). In December 2018, the National Assembly for Wales published a report on Suicide prevention in Wales (**C2**). In the report Professor John is quoted extensively, advocating training, resource accessibility, self-harm tracking to improve data collection (**R5**), the importance of doing more in schools to address suicide and self-harm (**R6**), raising awareness in journalism (**R1, R2**), and the need for specific funding for suicide prevention.

Influencing resource allocation for suicide prevention

In response to the aforementioned 'Everybody's Business' report in 2018 (**C3**), and as part of its subsequent recommendations in the implementation of the 'Talk to me 2' strategy, the Welsh Government pledged an additional GBP500,000 a year specifically to support national and regional approaches to preventing suicide and self-harm (**C4**). The then Health Minister said: ***"we will target the additional investment we are making towards actions that can help prevent and reduce suicidal behaviours, as well as providing appropriate support to communities to address this complex issue. As a society, we all need to work together to prevent suicide. Friends, families, organisations, and communities all have a part to play."***

In 2016 Professors John and Lloyd conducted research to re-evaluate the quality of prescribing for depression (a key risk factor for suicide) in young people (**R7**). This research identified a significant gap in young people's mental health research. The potential to bring together billions of pieces of data (including administrative health, social and education data, to psychological and clinical data) on to one platform, enabled by the SAIL Databank, has attracted a further investment of over GBP12,000,000.

Supporting the media in the responsible reporting and portrayal of suicide and suicidal behaviour

Professor John's research on media reporting preceding and during the Bridgend suicide cluster (**R1, R2**), brought her to the attention of the Samaritans. As a result of this research, she attended meetings with Welsh journalists to discuss the principles of responsible reporting. She also worked with the Samaritans Wales office to translate their media guidelines into Welsh and for their formal adoption in Wales (**C4**). This collaboration has also led her to consult on numerous television programmes. As a result of her input, the depictions of suicide in BBC, ITV and Channel 4 soap opera storylines (Casualty, Coronation Street and Hollyoaks) were changed, including the avoidance of details relating to methods used and the construction of storylines. As attested by the executive lead of Samaritans' Media Advice Service, ***"Given the millions of viewers for these programmes it is vitally important to address issues that are likely to affect vulnerable individuals (such as details of methods) and promote protective behaviours (stories of help-seeking or recovery). Irresponsible depictions can have an immense reach across the population, as seen in recent studies published in relation to the Netflix youth drama "13 Reasons Why" where a suicide death was depicted graphically and is associated with increases in imitative suicidal behaviour. Prof John worked with us with producers, writers and actors on the shows with a number of meetings held on sets across the UK. Her input and expertise were extremely useful and ensured that these programmes were aired with appropriately informed consultation. The Coronation street storyline in particular was changed in a number of ways as a result of the input from Samaritans with Prof John"*** (**C4**).

Professor John was also part of a team that created the Public Health England national guidance on the identification and prevention of suicide clusters, which referenced the work on suicide clusters (**R1**), media reporting (**R2**) and cyberbullying (**R6**). The guidance is used extensively across the UK by local public health teams in managing suspected suicide clusters (**C5**).

Providing practical guidance for schools and youth services

Professor John's research was instrumental in the recommendation for and development of Welsh Government guidance on early intervention and the safe management of self-harm and suicidal thoughts in young people. In a research engagement seminar presenting findings from **R5, R6** and **R7**, attended by stakeholders from across government, education, health and social services, which prompted teachers' requests for practical advice on how to help. This seminar resulted in a recommendation for guidance on managing self-harm for those working with young people, which was reiterated in 'Mind over Matter', a 2018 report on the step change needed in emotional and mental health support for children and young people in Wales (**C6**). In September 2019, the Welsh government launched school guidance on "Responding to issues of self-harm and thoughts of suicide in young people", issuing hard copies to all 1,569 schools in Wales (**C7**). The guidance is used by school staff and governors, youth-services workers, social workers, health professionals, and voluntary organisations working with children and is now available in hard copy and online.

Reducing access to the means of suicide

Analysis of data from SID-Cymru (**R3**) identified several factors relevant to the deaths, from socio-demographic and educational factors to access to lethal means of suicide (antidepressants and firearms). This analysis informed the Public Health Wales "Thematic review of deaths of children and young people through probable suicide, 2006-2012" (**C8**). This audit combined with their Cochrane reviews of means restriction for the prevention of suicide has led to changes in the guidance for bridge design in Wales. Architects of the Pont Menai Suspension Bridge discussed suicide prevention aspects with Professor John, ***"As a result considerations for suicide prevention (parapet height etc) were incorporated into the design of the bridge which will have long term impact and save lives"*** (**C9**). Additionally, Swansea research informed changes in antidepressant prescribing guidance that was circulated to all GP practices in Wales in 2015; this guidance highlighted that ***"doctors are reminded that when prescribing for depressive illness in children and adolescents***

only fluoxetine has been shown to be effective and when initiated should be carefully monitored in line with current guidance (see current BNF for advice, which is replicated on the reverse of this letter). Use of other medication to treat depressive illness should be initiated by a specialist and only when ongoing monitoring has been put in place” (C10). Swansea research also underpinned the publication of new guidance on firearms licensing law, New guidance on firearms licensing law published in October 2014, incorporates the recommendation about safe storage of firearms including inspection by police of storage arrangements. (C11). As a result of this program of work on means restriction, Professors John and Lloyd were invited to be co-directors of the Cochrane Suicide and Self Harm Satellite.

International Reach

The success of SID-Cymru has led to similar systems being adopted internationally. For example, Swansea have collaborated with the Public Health Agency in Canada to support the development of a similar system there (C12).

5. Sources to corroborate the impact

C1. Talk to me 2: Suicide and Self Harm Prevention Strategy for Wales 2015-2020, (See p.5), <https://bit.ly/3aNhphJ>.

C2. Everybody’s Business: A report on suicide prevention in Wales, December 2018. (See paragraphs 25, 93, 129, 139, 209, 227, 273, 281) <https://bit.ly/3bB6BM7>

C3 Press release from Welsh Government, 20 February 2019 (PDF).

C4 Testimonial from Executive Lead, Samaritans Media Advice Service, December 2020.

C5 Identifying and responding to suicide clusters: A practical resource published by Public Health England, September 2019 <https://bit.ly/2ZKp3fF>.

C6 Mind Over Matter – A report on the step change needed in emotional and mental health support for children and young people in Wales, National Assembly for Wales Children, Young People and Education Committee [April 2018](#)

C7 Responding to issues of self-harm and thoughts of suicide in young people Guidance for teachers, professionals, volunteers and youth services. Welsh Government, Sept 2019 <https://bit.ly/3kj6icl>.

C8 Thematic review of deaths of children and young people through suicide, 2013-2017 Publisher: Public Health Wales NHS Trust, 2019.

C9 Testimonial from WG lead, Structures Manager- Transport, Welsh Government, 18 Dec 2020.

C10 Welsh Health Circular, Prescribing for children and young people in relation to antidepressants, October 2015.

C11 Child Death Review Programme, Annual Report, July 2015. P.30, <https://phw.nhs.wales/services-and-teams/child-death-review/child-death-review-publications/child-death-review-programme-annual-report-july-2015/>

C12 Thibodeau *et al*, Individual, programmatic and systemic indicators of the quality of mental health care using a large health administrative database: an avenue for preventing suicide mortality, Health Promotion and Chronic Disease Prevention in Canada, Research, Policy and Practice Vol 38, No 7/8, July/August 2018, doi.org/10.24095/hpcdp.38.7/8.04.