## SAIL USER FORUM..... DATA to POLICY

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## We don't just do data linkage studies South Wales Cluster Studies

Community distress

Stage 1: Define the boundaries of a 'cluster'.

Stage 2: Identify influences on development, maintenance & initiation. Linked ED data

Two relatively small grants by todays standards

Dennis et al,. Use of routinely collected data from suicide clusters to influence social and health care service delivery NISCHR. 2012-2014. £194,000 John A et al Understanding suicide clusters through exploring self harm behaviours-CHERISH. NISCHR, 2014-2016. £201,000

9 publications-identification, newspaper quantity, quality and PRINTQUAL, content analysis, qualitative study, long term outcomes

Highlighted importance of data linkage to field, never did a press release, practice guidance



OPEN ACCESS <u>F</u> PEER-REVIEWED RESEARCH ARTICLE

Identifying Probable Suicide Clusters in Wales Using National Mortality Data



Identifying and responding to suicide clusters A practice resource

### **Antidepressants in CYP**

#### Fluoxetine

Real time data, evidence for professionals to change practice

Private briefing CYP Education Committee

Sit on the Expert Advisory Group for T4CYP Programme board

WeMeRec bulletin, Case study on AD, training package

Media

- Series of publications and collaborations
- HOIP funded UK wide CYPMH

**Repeating analysis** 



Read latest

Monitoring prostate

or radiotherapy

More on this ton

fertilising an egg

as surgery or radiotherapy

Study finds ecigarettes helped 18,000 smokers to quit last yea

cientists create life without

rexit Briefing: Life science

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cancer as good as surgery

FINANCIAL TIMES

10 Saved

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HOME WORLD UK COMPANIES MARKETS OPINION WORK & CARFERS LIFE & ARTS

Surge in antidepressant use by children

essant prescriptions for children and teenagers have increased by

on Friday raise ne

almost a third in the past decade — and the majority of new prescriptions are for a drug that is not licensed for use in young patients — according to the first large-scale tus study of the way GPs in spont depression and the details of the second state of the secon

A team at Swansea University analysed anonymised prescribing data and

records for 358,000 patients aged six to 18 from GP practices across Wales. Results, which were released at the British Science Festival on Thursday and

sation of unhappiness in children, said Dr Ann John, the study

Increase of almost a third in past decade, say researchers



Summary

A depressive episode should be stratified as

mild, moderate, or severe according to the

ICD-10 criteria, and be treated accordingly

this information.

people

It can be useful to use a systematic assessment

specifically asking about depression and suicide

rather than relying on the person volunteering

'Watchful waiting' may be appropriate for

If pharmacological therapy is to be considered this should be following diagnosis and

Patients and their parents or carers should be

given enough information so that they can give

meaningful and properly informed consent before any form of treatment is initiated.

Fluoxetine is the only antidepressant with

a marketing authorisation for use in young

period, practical assistance can be helpful.

assessment by an appropriate specialist.

some patients with mild depression. During this

#### Depression in young people

It has been estimated that 1 in 10 young people between the ages of five and 15 years have a clinically diagnosable mental disorder and that the prevalence of depression in this age group is around 0.9%.123 There have been calls for surveys to be repeated as these prevalence figures are now over a decade old and there is little published data to show how the rate of diagnosed depression has changed in recent years, despite the perception that children and young people are more troubled than in previous generations.4 More contemporaneous data show that the total number of referrals to Child and Adolescent Mental Health Services (CAMHS) in Wales approximately doubled

This bulletin discusses the various tiers of menta health provision for young people, some appropriate non-pharmacological management strategies, and the appropriate use of medication in this population.

between April 2010 and July 2014.

A 2014 enquiry conducted by the Welsh Government highlighted concern over the increasing use of prescription medication for mental health problems in children and young people.5 A subsequent study, published in 2015, analysed routinely collected primary care prescribing data in Wales and found that 'incident' or new antidepressant prescribing for young people has been increasing since 2006.6 It was found that three times more young females than young males received a new prescription for antidepressants that prescribing was twice as high in deprived area compared to more affluent areas, and that most prescribing was in the 15-18 years age group.6

myFT

These results may reflect the limited availability of alternatives to medication for this population and further highlight the need for support for children and vouna people seeking help for mental health problems in primary care."

Diagnosis Depression is a major risk factor for suicide in

Psychological Medicine, Page 1 of 13. © Cambridge University Press 2018 ORIGINAL ARTICLE di 11.1175000000 Recent trends in primary-care antidepressant prescribing to children and young people: an e-cohort study A. John<sup>14</sup>, A. L. Marchani<sup>1</sup>, D. L. Fone<sup>2</sup>, J. L. McGreger<sup>1</sup>, M. S. Dennis<sup>1</sup>, J. O. A. Tan<sup>1</sup> and K. Lloyd<sup>1</sup> <sup>1</sup>Ter lestinis of Holfe Informatics Reserved, Sources University Medical School, Singhten Park, Sources, UK Dision of Population Medicine, Solvel of Medicine, Carolff University, Carolff, UK Background. Concerns relating to increased use of psychotropic medication contrast with those of under-treatment and

under-recognition of common mental disorders in children and young people (CVP) across developed countries. Little is known about the indications resorded for antidecressant prescribing in primary care in CVP.

Method. This was an electronic cohort study of routinely collected primary-care data from a population of 1.9 million. Wales, UK. Prisson regression was undertaken to model adjusted counts of recorded depression symptoms, diagnoses and articlenessent prescriptions. Associated indications were explored.

398393 peristered radients ared 6-18 nears between 1 January 2018 and 31 December 2018 provided a



**Swansea University Medical School Vsgol Feddygaeth Prifysgol Abertawe** 

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#### Adolescent Mental Health DATA PLATFORM

SAIL DATABANK

## Why use data linkage?

- Many studies into MH face problems:
  - People most likely to experience poor mental health may be less likely to take part
  - Many measures are selfreported and may be subject to bias and/or their clinical meaning may be unclear
  - People are lost to follow up
- These problems may be partly overcome through using linkage to routinely collected health and social care data
- Real world data
- It speaks to policy makers, the public and practitioners

Wolfson Centre

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**ADR Wales** 



### **Using Research Evidence to Inform Policy & Practice**

Types of academic/policy engagements

#### **Pre-COVID**

Advisory roles (Scientific Advisory Committees, Expert Groups) Member MRC MH and Neuroscience Board Chair of National Advisory Group to Welsh Government on Suicide and SH Prevention -2014 APPG Suicide Prevention, Medical Research, Fit and Healthy

#### COVID

Member TAG Chair RCBI (sub-group TAG) Member Children and Schools (sub-group TAG) Member SPI-B (sub-group SAGE) then Co-chair Member SAGE Steering Group Member International COVID-19 Suicide Prevention Research Collaboration

#### NOW

Ministerial Groups – MH Schools, MH and Universities Chair Cross- Government Group Suicide Prevention





Adolescent Mental Health DATA PLATFORM



# Making a difference

Two models

- ADR/Wolfson
  - Relationships/Trust (expertise, overstating, group think)



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Wolfson Centre for Young People's Mental Health Canolfan Wolfson ar gyfer lechyd Meddwl Pobl Ifanc



## School absence and exclusion in young people who self-harm in Wales

- Absence and exclusion associated range of poor outcomes later in life ed attainment, employment, and poverty.
- Prev small studies, Most based on questionnaires or interviews
- Often in school or clinical settings so miss young people.
- Some who SH, have MH problems and those not at school less likely to participate, more likely to drop out.
- SH adolescents, 1/10 15 year olds, largely hidden, need of support
- E-cohort study, ADP@SAIL, 400000 children 2012/12 to 2015/16
- Sh/MH record up 24 years in primary care or hospital





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ledica

### Absenteeism

- Rates consistently higher in those with a record of SH compared to those without across all ages.
- Rates increase with age.
- Pupils with record of SH 2xs absent in the most compared to the least deprived quintile





Wolfson Centre for Young People's Mental Health Canolfan Wolfson ar gyfer lechyd Meddwl Pobl Ifanc

## **Exclusions**

- Exclusions more common among older children, decrease final year of secondary school
- Rates higher in those who self-harm (x7).
- Notable increases in pupils aged 15.
- Higher with deprivation
- Boys with record of SH more 2xs than girls.



Rates of exclusion in those who self-harm and those without any disorder





- Children who self-harm spend less time at school.
- Bi-directional



ADDYSG CYMRU EDUCATION WALE

- Potential indicator for current/ future poor MH, routinely collected by schools/ LEAs
- Could be used to target assessment and early intervention (?vs current focus).
- School-based MH provision and integration with MH services a major strategic priority in Wales. Absences and exclusions should be a part of this
- School-based MH prevention strategies (whole school approach) to promote self-help strategies, awareness of when to seek help, resilience





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Home > Senedd Business > Pupil absence

#### **Pupil absence**

Published 12/04/2022 | Last Updated 12/04/20 | Reading Time 7 minutes

| Issue Details | Issue History | y F     | elated Meetings |          |
|---------------|---------------|---------|-----------------|----------|
| Inquiry       | Receiving     | Draftin | g Report        | Complete |
| proposed      | evidence      | report  | published       |          |



Welsh Parliament Children, Young People and Education Committee

Pupil absence

November 2022

• Changed definition of persistent absence





Of the group of 10-15 yr olds who presented in the emergency room, the following were admitted:

- 76% of girls
- 49% of children

| Seen in      | <u>%</u> |
|--------------|----------|
| GP only      | 25       |
| HA only      | 7        |
| ED only      | 22       |
| GP & HA      | 15       |
| GP & ED      | 13       |
| ED & HA      | 4        |
| GP & ED & HA | 15       |



6

Additional material is

(http://dx.doi.org/10.1136/

archdischild-2019-317248).

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School, Swansea University,

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skatoon. Saskatchewan

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#### Responding to issues of self-harm and thoughts of suicide in young people Guidance for teachers, professionals, volunteers and youth services







Self-harm is one of the most important risk factors for suicide. Although rare in young people, suicide is still the leading cause of death in males and females aged 10-19 years in England and







## Self-harm in children and young people

- Policy makers across departments
- Challenging stigma and stereotypes
- Help-seeking and responses

Self-harm presentation across healthcare settings by sex in young people: an e-cohort study using OPEN ACCESS routinely collected linked healthcare data in Wales, UK

Amanda Marchant,<sup>1</sup> Samantha Turner,<sup>1</sup> Lloyd Balbuena,<sup>2</sup> Evyn Peters,<sup>2</sup> Dave Williams,<sup>3</sup> Keith Lloyd,<sup>1</sup> Ronan Lyons,<sup>1</sup> Ann John<sup>6</sup>

published online only. To view Background This study used individual-level linked please visit the journal online data across general practice, emergency departments (EDs), outpatients and hospital admissions to examine contacts across settings and time by sex for self-harm in individuals aged 10-24 years old in Wales, UK. Methods A whole population-based e-cohort study of routinely collected healthcare data was conducted. Rates of self-harm across settings over time by sex were examined. Individuals were categorised based on the

ABSTRACT

#### Most self-harm research is conducted in

- hospital settings although many individuals are managed in primary care. There has been no previous research examining
- linked whole population GP and hospital admissions nor incorporating emergency department data.







## Healthcare contacts prior to suicide





MH service contact in year before

Contacts the month before

Contacts the week before





Last point of contact most commonly associated with MH and most often occurred in GP

At any week in the year before their death, cases were more likely to contact healthcare services than controls.

SH, MH, substance misuse contacts strongly linked with suicide risk, more so when in ED/emergency admissions.







## Concern and conflation

the lomj covid-19 Research \* Education \* News & Views \* Campaigns \* Jobs \*

#### Editorials

#### Trends in suicide during the covid-19 pandemic

*BMJ* 2020 ; 371 doi: https://doi.org/10.1136/bmj.m4352 (Published 12 November 2020) Cite this as: *BMJ* 2020;371:m4352

## Article Related content Metrics Responses Ann Iohn, professor of public health and psychiatry<sup>1</sup>, Jane Pirkis, director<sup>2</sup>, David Gunnell, professor of epidemiology

Ann John, professor of public health and psychiatry<sup>1</sup>, Jane Pirkis, director<sup>2</sup>, David Gunnell, professor of epidemiology<sup>3</sup>, Louis Appleby, director<sup>4</sup>, Jacqui Morrissey, assistant director<sup>5</sup>

A ... the are affiliations as



Suicide figures are up 200% since lockdown. Could 2 friends please copy and re-post this tweet? We're trying to demonstrate that someone is always listening.

Call 116 123 (Samaritans UK) Just two. Any two. Copy, not retweet #SuicideAwareness

3:25 PM · Jun 29, 2020 · Twitter for iPhone

1.4K Retweets 1.9K Likes

The lockdown measures are a frontal attack on our fundamental freedoms.

They also make no sense from a health perspective.

The lockdowns will cause more people to die from other causes like cancer, depression and suicide.

8:45 pm · 25 Oct 2020 from Toronto, Ontario · Twitter for Android

## Self-harm healthcare contacts during COVID-19, Wales

We compared service presentations with self-harm before and during the pandemic:

- Across primary and secondary care
- Using data from the population of Wales
- During the first 12 months of the pandemic Waves 1 and 2





## Self-harm healthcare contacts during COVID-19

Number of self-harm contacts in primary and secondary care



- Self-harm contacts dropped in Waves 1 and 2, with the minimum at the start of stay-at-home restrictions.
- The number of self-harm contacts was never above pre-pandemic levels.
- Differences across deprivation levels remained stable.

Fear of infection, stay-at-home orders and 'protect the NHS' may have prevented those who SH from accessing healthcare services.



## Self-harm healthcare contacts during COVID-19

Of those who self-harmed during Wave 1:

- A lower-than-usual number contacted only ED but proportion of all ED contacts increased (?sense it increased)
- A higher-than-usual proportion contacted only GPs, or all of GP, ED and hospital admissions.

During Wave 1, patients preferentially contacted GPs, ?fear of infection in ED and hospitals ?trying to 'protect NHS'





## Self-harm healthcare contacts during COVID-19



- Presentations with more lethal methods of SH increased first 12 months of pandemic.
- Proportion of ED presentations SH hospitalised did not change during Wave 1, dropped to below pre-pandemic levels Wave 2.
- Females aged 10-25 years more likely to be seen in ED and/or hospitalised with SH.
- Fewer-than-usual adults (25+ yrs) admitted to hospital with SH Wave 2, particularly males.

Those who did seek help potentially encountered stringent criteria for hospitalisation, particularly male adults.

Unmet need and psychosocial assessments

WHO bulletin

| Scientific brief  | World Health   |
|---|--|
| 2 March 2022  | Station  |
| Introduction  |  |
| The COVID-19 pandemic has had a severe imp<br>many individuals have adapted (2), others have<br>infection (3-5). The pandemic also continues to<br>in suicidal behaviour (6).   | act on the mental health and wellbeing of people around the world (/). While<br>experienced mental health problems, in some cases a consequence of COVID-11<br>impede access to mental health services and has raised concerns about increases<br>and has raised concerns about increases and has raised concerns about increases<br>and has raised concerns about increases and has raised concerns about increases<br>and has raised concerns about increases<br>about increases<br>about the second second second has a second second has a se |
| The aim of this scientific brief is to present curr<br>prevention, response and recovery efforts world<br>makers and any other stakeholders interested in   | ent evidence regarding the mental health aspects of the pandemic and inform<br>wide. The target audience includes health care providers, researchers, policy-<br>the evidence on COVID-19 and mental health.   |
| Key questions   |  |
| This scientific brief provides a comprehensive of<br>1. the impact of the COVID-19 pandemic<br>2. the impact of the COVID-19 pandemic<br>3. the risk of infection, severe illness and<br>4. the impact of the COVID-19 pandemic<br>5. the effectiveness of psychological inter<br>problems and/or maintain access to me | verview of the current evidence about:<br>on the providence of mental health symptoms and mental disorders<br>on prevaience of visicial thoughts and behaviours<br>death from COVID-19 for people living with mental disorders<br>on mental health services<br>ventions adapted to the COVID-19 pandemic to prevent or reduce mental health<br>all health services.  |
| Each question is addressed in a dedicated sectio<br>summarize the data described therein.   | n of the brief. Key findings are highlighted at the end of each section to   |
| Process and methodology   |  |
| Because WHO Global Health Estimates for free<br>estimates, the brief summarizes recent estimates<br>evidence from research commissioned by WHC<br>(published up to October 2021) (8) and an upda<br>relevant WHO publications (10-12). Literature 1   | uency of mental disorders are aligned with Global Burden Disease study<br>of the Global Burden of Disease 2020 study (7). This brief is also based on<br>including an unbeella review of systematic reviews and meta-analyses<br>to to a living systematic review (updated to September 2021) (9), and other<br>searches in commissioned reviews were not restricted by language.  |
| Research evidence   |  |
| Prevalence of mental health problems: GBD   | 2020   |
|   |  |

## Timing is everything.....



Uni students, Prisons, EOTAS, Exclusions and suicide, Prescribing..... Development MH and Suicide Self-harm Strategies