Anxiety and depression among children and young people involved in family justice court proceedings: longitudinal national data linkage study

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Background
Little is known about mental health problems of children and young people (CYP) involved with public and private law family court proceedings, and how these CYP fare compared to those not involved in these significant disruptions to family life.

Aims
This study examined records of depression/anxiety in CYP involved in public and private law proceedings using linked population-level data across Wales.

Method
Retrospective e-cohort study. We calculated the incidence of primary-care-recorded depression/anxiety among CYP involved in these proceedings and in a comparison group, using Poisson regression. Depression/anxiety outcomes following proceedings were evaluated using parwise Cox regression, with age- and gender-matched controls of CYP who had no involvement with the courts.

Results
CYP in the public group had twice the risk of depression (adjusted incidence rate ratio aIRR = 2.2; 95% CI 1.9–2.6) and 20% higher risk of anxiety (aIRR = 1.2; 95% CI 1.0–1.5) relative to the comparison group. The private group had 60% higher risk of depression (aIRR = 1.6; 95% CI 1.4–1.7) and 30% higher risk of anxiety (aIRR = 1.3; 95% CI 1.2–1.4). Following private law proceedings, CYP were more likely to have depression (hazard ratio HR = 1.9; 95% CI 1.7–2.1), and anxiety (HR = 1.4; 95% CI 1.2–1.6) than the control group. Following public proceedings, CYP were more likely to have depression (HR = 2.1; 95% CI 1.7–2.5). Incidence of anxiety or depression following court proceedings was around 4%.

Conclusions
Findings highlight the vulnerability of CYP involved in family court proceedings and increased risk of depression and anxiety. Schools, health professionals, social and family support workers have a role to play in identifying needs and ensuring CYP receive appropriate support before, during and after proceedings.

Keywords
Care proceedings; administrative data; data linkage; children; mental health.

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The Children and Family Court Advisory and Support Service (Cafcass) is a government organisation that represents children’s best interests within family court proceedings, with the aim of ensuring that the welfare of the child is central in decision-making. Private law family court cases are disputes, usually between parents after relationship breakdown, about arrangements for a child’s upbringing, such as where a child should live and/or with whom they should have contact. Public law family court cases are brought by local authorities and relate to the safety or welfare of children and young people (CYP). If local authorities intend to remove a child from his or her parents’ care or assume parental responsibility, they must apply for a care order; however, to our knowledge, no studies have compared those involved in public and private law family court proceedings, and with a general population comparison group, using large-scale administrative data. This omission is concerning, given that CYP in both types of court case will have been exposed to very difficult family circumstances and disruptions. Far better evidence is needed to ensure that mental health needs are understood and taken into account in best interest decisions. Studies based on population-level data are persuasive in terms of providing policy makers and practitioners with robust evidence to shape service development.

Population-level data collected routinely by Cafcass Cymru (the Welsh Government organisation responsible for the functions of Cafcass in Wales) are available within the privacy-protecting Secure Anonymised Information Linkage (SAIL) Databank, presenting a unique opportunity for linkage to health data at the individual level to explore mental disorders in CYP involved with...

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Cafcass Cymru. The aim of this study was to examine incidence of depression and anxiety in CYP involved in public and private family court proceedings across Wales, compared with CYP not involved in family court proceedings. Given the nature of the longitudinal data available within SAIL, a further aim was to examine risk of depression and anxiety following family court proceedings, controlling for medical histories of these conditions.

**Method**

**Study design**

This was a retrospective e-cohort study to investigate incidence rates (IRs) and incident rate ratios (IRRs). A matched cohort design was also used to investigate risks of depression and anxiety following initiation of court proceedings.

**Data source and linkage**

All data within the SAIL Databank are treated in accordance with the Data Protection Act 2018 and are compliant with the General Data Protection Regulation. During the anonymisation of data sources within the SAIL Databank, individuals are assigned an anonymised linking field (ALF) enabling linkage of person-level data-sets. The family justice data used for this study included the aforementioned routinely produced extract of administrative case management data maintained by Cafcass Cymru. Relevant case information for this study included: child’s week of birth and gender, and the date and type of court application (public or private).

The Welsh Longitudinal General Practice (WLGP) data contain primary care records for patients registered with a Welsh general practice (GP) for approximately 80% of practices that supply data to the SAIL Databank. Each record contains information such as Read Codes (hierarchical nomenclature used by primary care physicians to record clinical summary information, i.e. medical diagnoses and symptoms) and event date (date of entry of the Read Code(s)). Linkage was also made to the Welsh Demographic Service (WDS) data-set (an administrative register of all individuals in Wales who use the National Health Service (NHS)), for creation of our population denominator and to extract demographic information.

**Study population**

This study included CYP involved with Cafcass Cymru between 1 January 2011 and 31 December 2018, aged <18 years at first recorded court application date. We identified 11 545 CYP involved in public law proceedings and 26 569 involved in private law proceedings. A further 936 who had been involved in both public and private law proceedings during this period were allocated to the public group. Over 86.9% (33 933 of 39 050) of these individuals were assigned an ALF enabling linkage of their information to the other data sources within SAIL. The sample was further restricted to those who had a WDS record (n = 22 565) and were registered with a SAIL-supplying GP for the same period with at least 12 months of continuous primary care data (n = 22 565). The final sample therefore consisted of 5524 CYP involved in public and 17 041 involved in private law proceedings (Fig. 1). Linkage characteristics of the Cafcass cohort in SAIL have been described elsewhere, further information on the CYP assigned an ALF (n = 33 933) and the final sample (22 565) are provided in supplementary Table 1 (available at https://doi.org/10.1192/bjo.2022.6), indicating greatest differences (i.e. loss of representation) in the public group for those in the two most deprived areas.

**Fig. 1 Flow diagram of study participants.**

*Children and young people (CYP) < 18 years included in public and private law proceedings between 2011-2018*  
*Total n = 39 050 (Private: n = 26 569; Public: n = 11 545; Public and Private: n = 936)*

*CYP with matched ALF*  
*Total n = 33 933*  
*(Public and Private: n = 24 219; Public: n = 8874; Public and Private: n = 840)*

*CYP registered with WDS*  
*Total n = 33 712*  
*(Private: n = 24 160; Public: n = 9552)*

*CYP registered with SAIL GP*  
*Total n = 22 565*  
*(Private: n = 17 041; Public: n = 5 524)*

*Final samples*  
*(Private: n = 17 041; Public: n = 5 524)*

*Comparison group of CYP n = 680 617*

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a. At this stage, children and young people (CYP) involved in both public and private law proceedings were grouped with the CYP involved in public law proceedings.  
b. CYP who were Welsh residents, registered to a SAIL-supplying general practice (GP) between 1 January 2011 and 31 December 2018 with at least 12 months of continuous general practice data.  
WDS, Welsh Demographic Service.
A general comparison group of all 680 617 CYP aged <18 years who were not involved in family court proceedings was selected from the SAIL Databank for the same period. From this group, we randomly selected ten controls per case matched on age and gender, resulting in a control sample of 225 650 CYP for the time-to-event analyses.

Measures

WLG and CPROS records from 1 January 2011 to 31 December 2019 were analysed for the presence of Read Codes indicating diagnoses or symptoms of depression and anxiety based on validated code lists developed by the Adolescent Mental Health Data Platform. A new record of depression or anxiety was defined as an entry with no episode recorded for that condition in the previous 12 months.

Demographic information was collected from the WDS dataset. Age and residential information for each individual was collected based on the start of data collection for each year for the incidence measures and on the date of the first court application for the time-to-event analyses (as described below). Age was described according to categories of under 10 years, 10–14 and 15–17 years. The Welsh Index of Multiple Deprivation (WIMD) is the Welsh Government’s official deprivation measure; WIMD 201414 provides deprivation scores for small areas of Wales (lower-layer super output areas (LSOAs)), which are ranked from 1 (most deprived) to 1909 (least deprived) based on a range of domains; each LSOA contained an average population of 1600 people. These were used and grouped into quintiles for this study.

Statistical analyses

The SAIL Databank was queried using Structured Query Language to compare the IRRs between these groups, all models adjusting for deprivation quintile, gender, resulting in a control sample of 225 650 CYP for the time-to-event analyses. Time-to-event analyses were conducted to explore the impact of involvement in public or private court proceedings on risk of depression and anxiety. We used Cox proportional hazard regression, a method that assumes the effect on event to be constant over time, to calculate hazard ratios (HRs) with 95% confidence intervals. The HRs represent the effects of court involvement versus no court involvement on the baseline risk for either mental health condition during the follow-up period. We modelled the length of time from date of first court application (index) to the first record of depression or anxiety, or to censorship (i.e. the earliest date from: death, leaving a SAIL-registered general practice, leaving Wales or 18th birthday). We fitted separate univariate models for depression and anxiety, and multivariate models adjusting for deprivation (at index date) and previous history of these conditions as covariates. These were stratified by court application type.

Project approvals

The project proposal was reviewed by the SAIL Information Governance Review Panel (IGRP) at Swansea University. This panel ensures that work complies with information governance principles and represents an appropriate use of data in the public interest. The IGRP includes representatives of professional and regulatory bodies, data providers and the general public. Approval for the project was granted by the IGRP under SAIL project 1040. Cafcass Cymru (the data owner of the family courts data) also approved use of the data for this project.

Sample characteristics

Over the study period, more than three times as many CYP were involved in private than public law proceedings (n = 17 041 and n = 5524 respectively) (Table 1); 76.7% (n = 4236) of the public law applications were related to section 31 care proceedings. Half (51%) of public and private applications involved boys, and both public and private applications were also more common in under-10-year-olds: 92.1% of the applicants in the private group fell within this age bracket, and 88.5% of the public group. Application numbers were higher for those residing in more deprived areas of Wales, almost three-fold for the private group and ten-fold for the public group in the most deprived versus the least deprived areas.

Incidence of depression and anxiety

Depression

Table 2 summarises the number of events (recorded diagnoses or symptoms), incidence rates and adjusted IRRs for depression by gender, age group, deprivation quintile and calendar year. The incidence rates for girls (private: 4.7/1000 PYAR (95% CI 4.5–4.9); public: 10.4/1000 (95% CI 9.9–11.0)) were higher than for boys (private: 2.4/1000 (95% CI 2.3–2.6); public: 2.9/1000 (95% CI 2.6–3.2)). Incidence of depression was therefore also twice as high in girls, compared with boys, in private cases (IRR = 1.9 (95% CI 1.6–2.4)) and three times as high in public cases (IRR = 3.1 (95% CI 2.3–4.3)). In the comparison group, girls also had higher rates (IRR = 2.4 (95% CI 2.3–2.5)).

Incidence of depression was also higher for older children (Table 2). Incidence was 0.4 cases per 1000 PYAR for those under 10 years of age in both private and public groups, and there was a marked age-related trend with increasing age for both the private

| Table 1 Sample characteristics | Comparison | Private court | Public court |
|-------------------------------|------------|--------------|-------------|
|                               | n %        | n %          | n %         |
| Total                         | 680 617    | 17 041       | 5524        |
| Gender                        |            |              |             |
| Male                          | 348 647    | 51.2         | 8744        |
| Female                        | 331 970    | 48.8         | 8297        |
| Age group                     |            |              |             |
| Under 10 years                | 461 182    | 67.8         | 15 702      |
| 10–14 years                   | 154 013    | 22.6         | 1297        |
| 15–17 years                   | 65 422     | 9.6          | 42          |
| Deprivation quintile^         |            |              |             |
| Least deprived                | 122 365    | 18.0         | 2142        |
| Second least deprived         | 108 270    | 15.9         | 2311        |
| Middle deprived               | 127 366    | 18.7         | 3018        |
| Second most deprived          | 159 674    | 23.5         | 3984        |
| Most deprived                 | 164 803    | 24.2         | 5272        |

^ Missing data for deprivation (comparison group: 18 139; private: 314; public: 97).
Table 2  Number of events (recorded diagnoses or symptoms) and incidence of depression among children and young people involved in private and public law proceedings, and in the comparison group

|                | Comparison (n = 680,617) | Private court (n = 17,041) | Public court (n = 5,524) |
|----------------|--------------------------|-----------------------------|--------------------------|
|                | Events, n | IR (95% CI) | IRR<sup>a</sup> (95% CI) | Events, n | IR (95% CI) | IRR<sup>a</sup> (95% CI) | Events, n | IR (95% CI) | IRR<sup>a</sup> (95% CI) |
| **Total**      | 16,485     | 4.6 (4.6–4.6) |                         | 384        | 3.5 (3.4–3.7) |                         | 212        | 6.5 (6.2–6.8) |                         |
| **Gender**     |            |              |                         |            |              |                         |            |              |                         |
| Male           | 5,077      | 2.8 (2.7–2.8) |                         | 135        | 2.4 (2.3–2.6) |                         | 48         | 2.9 (2.6–3.2) |                         |
| Female         | 11,408     | 6.5 (6.5–6.6) | 2.4 (2.3–2.5)*          | 249        | 4.7 (4.5–4.9) | 1.9 (1.6–2.4)*          | 164        | 10.4 (9.9–11.0) | 3.1 (2.3–4.3)*          |
| **Age group**  |            |              |                         |            |              |                         |            |              |                         |
| Under 10 years | 297        | 0.1 (0.1–0.2) |                         | 34         | 0.4 (0.4–0.5) |                         | 8          | 0.4 (0.3–0.5) |                         |
| 10–14 years    | 5,322      | 5.2 (5.2–5.3) | 36.2 (32.1–40.7)*       | 195        | 8.6 (8.2–9.0) | 19.1 (13.1–27.7)*       | 116        | 14.3 (13.5–15.2) | 36.3 (17.6–74.5)*       |
| 15–17 years    | 10,866     | 20.5 (20.4–20.7) | 142.8 (127.1–160.5)*   | 155        | 37.3 (35.3–39.4) | 75.6 (51.3–111.4)*     | 88         | 52.9 (49.3–56.9) | 119.4 (57.3–248.9)*    |
| **Deprivation quintile** |            |              |                         |            |              |                         |            |              |                         |
| Least deprived | 2,585      | 3.9 (3.8–3.9) |                         | 54         | 3.9 (3.6–4.3) |                         | 22         | 9.7 (8.4–11.3) |                         |
| Second least deprived | 2,370     | 4.1 (4.1–4.2) | 1.1 (1.0–1.2)*          | 44         | 2.9 (2.7–3.3) | 0.8 (0.5–1.2)           | 23         | 7.3 (6.3–8.4) | 0.8 (0.5–1.5)          |
| Middle deprived | 2,886     | 4.3 (4.3–4.4) | 1.2 (1.1–1.2)*          | 64         | 3.3 (3.0–3.6) | 0.9 (0.7–1.4)           | 35         | 7.1 (6.4–8.0) | 0.8 (0.5–1.4)          |
| Second most deprived | 3,646   | 4.9 (4.9–5.0) | 1.4 (1.3–1.5)*          | 82         | 3.3 (3.0–3.5) | 1.0 (0.7–1.4)           | 49         | 6.4 (5.8–7.0) | 0.8 (0.5–1.3)          |
| Most deprived  | 4,644      | 5.4 (5.4–5.5) | 1.6 (1.5–1.7)*          | 133        | 4.0 (3.8–4.2) | 1.3 (0.9–1.8)           | 79         | 5.7 (5.3–6.1) | 0.8 (0.5–1.3)          |
| **Year**       |            |              |                         |            |              |                         |            |              |                         |
| 2011           | 1,278      | 2.9 (2.9–3.0) |                         | 8          | 0.7 (0.6–0.9) |                         | 9          | 2.5 (2.0–3.1) |                         |
| 2012           | 1,747      | 3.9 (3.8–3.9) | 1.2 (1.1–1.3)*          | 16         | 1.3 (1.1–1.5) | 1.3 (0.6–3.1)           | 7          | 1.8 (1.4–2.3) | 0.5 (0.2–1.4)          |
| 2013           | 1,927      | 4.3 (4.2–4.3) | 1.3 (1.2–1.4)*          | 23         | 1.7 (1.5–2.0) | 1.5 (0.7–3.4)           | 18         | 4.4 (3.8–5.2) | 1 (0.4–2.3)           |
| 2014           | 2,004      | 4.4 (4.4–4.5) | 1.4 (1.3–1.5)*          | 33         | 2.3 (2.1–2.6) | 1.5 (0.7–3.4)           | 21         | 5.0 (4.3–5.8) | 1 (0.5–2.2)           |
| 2015           | 2,322      | 5.1 (5.1–5.2) | 1.7 (1.5–1.8)*          | 57         | 3.9 (3.6–4.3) | 2.2 (1.0–4.6)**          | 24         | 5.6 (4.9–6.4) | 1 (0.4–2.1)           |
| 2016           | 2,101      | 4.6 (4.6–4.7) | 1.5 (1.4–1.6)*          | 57         | 3.8 (3.5–4.2) | 1.8 (0.8–3.8)           | 41         | 9.5 (8.6–10.6) | 1.4 (0.7–2.8)          |
| 2017           | 2,406      | 5.3 (5.2–5.4) | 1.8 (1.7–1.9)*          | 80         | 5.5 (5.1–5.9) | 2.1 (1.0–4.4)**          | 38         | 9.1 (8.1–10.1) | 1.1 (0.5–2.3)          |
| 2018           | 2,700      | 6.3 (6.2–6.4) | 2.1 (1.9–2.2)*          | 110        | 7.9 (7.4–8.5) | 2.6 (1.3–5.4)**          | 54         | 14.0 (12.8–15.4) | 1.5 (0.7–3.1)          |

IR, incident rate per 1000 person-years at risk; IRR, incident rate ratio; CI, confidence interval.

<sup>a</sup> Adjusted for calendar year, gender, age and deprivation.

* P < 0.001; ** P < 0.05 (Wald test).
Fig. 2 Adjusted incidence rate ratios (IRRs) of depression over time for children and young people involved in private and public law proceedings and the comparison group.

Table 3 Number of events (recorded diagnoses or symptoms) and incidence of anxiety among children and young people involved in private and public law proceedings, and in the comparison group.

| Year | Events, n | IR (95% CI) | IRR a (95% CI) | Events, n | IR (95% CI) | IRR a (95% CI) | Events, n | IR (95% CI) | IRR a (95% CI) |
|------|------------|-------------|----------------|------------|-------------|----------------|------------|-------------|----------------|
| 2011 | 1130       | 2.6 (2.5–2.6) | 1              | 9          | 0.8 (0.7–1)  | 1              | 6          | 1.7 (1.3–2.2) | 1              |
| 2012 | 1362       | 3 (3–3.1)    | 1.1 (1–1.2)†   | 25         | 2 (1.8–2.3)  | 2.3 (2.1–4.9)† | 14         | 3.6 (3–4.3)  | 1.0 (0.7–1.4)  |
| 2013 | 1622       | 2.4 (3.5–3.7) | 1.3 (1.2–1.4)† | 27         | 2 (1.8–2.3)  | 2.1 (1–4.5)    | 12         | 2.9 (2.4–3.6) | 1.3 (0.3–3.6)  |
| 2014 | 1978       | 4.4 (3.4–4.4) | 1.6 (1.5–1.8)† | 53         | 3.3 (2.1–2.6) | 2.1 (1–4.4)    | 15         | 3.5 (3.0–4.2) | 1.5 (0.5–3.5)  |
| 2015 | 2336       | 5.2 (5.1–5.2) | 2 (1.8–2.1)†   | 53         | 3.6 (3–3.9)  | 3.1 (1.5–6.1)† | 13         | 3.5 (2.5–4.7) | 0.9 (0.4–2.5)  |
| 2016 | 2593       | 5.7 (5.6–5.8) | 2.2 (2.1–2.4)† | 80         | 5.4 (5–5.8)  | 4 (2.8–10)†    | 32         | 7.4 (6.8–8.4) | 2.1 (0.9–5.1)  |
| 2017 | 3181       | 6 (6–7.1)    | 2.7 (2.5–2.9)† | 95         | 6.5 (6–7.1)  | 4.5 (2.2–8.9)† | 32         | 7.6 (6.8–8.6) | 2 (0.8–4.8)    |
| 2018 | 3613       | 8.4 (8.3–8.5) | 3.2 (3–3.4)†   | 148        | 10.7 (10.1–11.3) | 6 (3.1–11.9)† | 28         | 7.3 (6.4–8.3) | 1.8 (0.7–4.3)  |

IR, incidence rate per 1000 person-years at risk; IRR, incident rate ratio; CI, confidence interval.

**P < 0.001; †P < 0.05 (Wald test).**
comparison group), again with little difference according to deprivation quintile (Table 3).

Trends over time for anxiety are shown in Table 3 and Fig. 3. There was a significant increase in the incidence of anxiety from 2011 to 2018 for the private group: from IR = 0.8/1000 PYAR (95% CI 0.7–1.0) cases in 2003 to IR = 10.7/1000 (95% CI 10.1–11.3) in 2018 (IRR = 6 (95% CI 3.1–11.9)). For the public group, rates of anxiety (ranging from IR = 1.7/1000 (95% CI 1.3–2.2) in 2003 to a high of IR = 7.6/1000 (95% CI 6.8–8.6) in 2017) were fairly stable over the study period (e.g. for 2018, IRR = 1.8 (95% CI 0.7–4.3)). In contrast, for the comparison group, rates of anxiety were almost three-fold in 2018 (IR = 8.4/1000 (95% CI 8.3–8.5)) compared with 2011 (IR = 2.6/1000 (95% CI 2.5–2.6)) with IRR = 3.2 (95% CI 3.0–3.4).

Comparing public, private and comparison group

Overall, incidence of depression was higher in the public group (IR = 6.5/1000 PYAR (95% CI 6.2–6.8)) than in the private group (IR = 3.5/1000 (95% CI 3.4–3.7)) and the comparison group (IR = 4.6/1000 (95% CI 4.6–4.6)) (Table 4 and Fig. 4). However, as can be seen from the adjusted IRRs, rates of depression were twice as high (IRR = 2.2 (95% CI 1.9–2.6)) in the public group and 60% higher in the private group (IRR = 1.6 (95% CI 1.4–1.7)), compared with the comparison group.

Incidence of anxiety was slightly lower in the public (IR = 4.7/1000 PYAR (95% CI 4.4–4.9)) and private (IR = 4.3/1000 (95% CI 4.2–4.5)) groups than in the comparison group (IR = 5.0/1000 (95% CI 4.9–5.0)). Following adjustment, rates were 30% higher in the private group (IRR = 1.3 (95% CI 1.2–1.4)) and 20% higher in the public group (IRR = 1.2 (95% CI 1.0–1.5)).

Time-to-event

Characteristics of the cohort and matched control group for the time-to-event analyses are provided in supplementary Tables 2 and 3. CYP involved in private law proceedings were significantly more likely to develop depression than the control group (HR = 1.9 (95% CI 1.7–2.1)) and this was also evident in boys and girls separately (Table 5). Similarly, they were more likely to have anxiety (HR = 1.4 (95% CI 1.2–1.6)). CYP involved in public law proceedings were also subsequently more likely to have depression than the control group (HR = 2.1 (95% CI 1.7–2.5)) but not anxiety (HR = 1.2 (95% CI 0.9–1.4)). Incidence proportions are also shown in Table 5: 4.2% of the private and 4.4% of the public cohorts had a new health record for anxiety or depression following court proceedings.

Discussion

Summary of main findings

The incidence of depression and anxiety recorded in primary care was higher for CYP involved in public and private family court proceedings compared with those not involved with family courts. Incidence of both recorded conditions was higher for girls and increased with increasing child age. However, adjusted rates did not vary by our measure of relative deprivation, as shown in the general population, suggesting heightened vulnerability of these CYP across the board. Regarding trends over time from 2011 to 2018, rates of depression and anxiety increased for those involved in private cases, mirroring trends in the comparison group, but they remained stable for those involved in public cases, perhaps reflecting differences in help-seeking behaviours.

| Table 4 | Total number of events (recorded diagnoses or symptoms) and incidence of depression and anxiety among children and young people involved in private and public law proceedings, and the comparison group |
|---------|----------------------------------------------------------------------------------|
| Depressive Events, $n$ | IR (95% CI) | IRR* (95% CI) | Anxiety Events, $n$ | IR (95% CI) | IRR* (95% CI) |
| Total | 17 081 | 6.5 (6.2–6.8) | 1.6 (1.4–1.7) | 18 437 | 4.6 (4.3–4.9) | 1.2 (1.1–1.3) |
| Comparison | 16 485 | 4.6 (4.6–4.6) | 1.0 (0.0) | 17 815 | 4.4 (4.0–4.9) | 1.0 (0.0) |
| Private court | 384 | 4.7 (4.3–4.7) | 1.3 (1.1–1.5) | 384 | 4.7 (4.4–4.9) | 1.2 (1.0–1.5) |
| Public court | 212 | 6.5 (5.2–8.8) | 2.2 (1.9–2.6) | 212 | 4.7 (4.4–4.9) | 1.2 (1.0–1.5) |

IR, incident rate per 1000 person-years at risk; IRR, incident rate ratio; CI, confidence interval.

*Adjusted for calendar year, gender, age and deprivation.

* $P<0.001$ (Wald test)
The results of our time-to-event analyses, focusing on occurrence of new diagnoses or symptoms of depression or anxiety following court involvement – and taking into account previous medical history – suggests that CYP involved in private law proceedings were more likely to have depression or anxiety than the control group. Those involved in public law proceedings were subsequently more likely to have depression. Just over 4% had anxiety or depression.

**Study strengths and limitations**

This is the first time that population-level family law records have been linked to health data sources in Wales to examine mental health outcomes for CYP, enabled through the SAIL Databank. This is the first time that population-level family law records have been linked to health data sources in Wales to examine mental health outcomes for CYP, enabled through the SAIL Databank. The majority of private law applications are for child arrangement orders but this study has not explored the

Table 5 Time-to-event analyses for anxiety and depression among children and young people (CYP) before and after private and public law proceedings

|                      | Anxiety                      | Depression                      |
|----------------------|------------------------------|---------------------------------|
|                      | Events, n (%)                | History of anxiety, n (%)        | Events, n (%)                |
|                      | Unadjusted HR (95% CI)       | Adjusted b HR (95% CI)          | Unadjusted HR (95% CI)       |
|                      |                             |                                 | Adjusted b HR (95% CI)       |
| Private court        |                              |                                 |                              |
| All                  | 17,041                      | 384 (2.3)                       | 13 (3.4)                     | 1.4 (1.2–1.5)*                   | 1.4 (1.2–1.6)*                   | 328 (1.9)                     | 15 (4.6)                     | 2.0 (1.7–2.2)*                   | 1.9 (1.7–2.1)*                   |
| Male                 | 8744                        | 148 (1.7)                       | 1.4 (1.2–1.7)*               | 1.4 (1.2–1.7)*               | 113 (1.3)                     | 2.1 (1.7–2.5)*               | 2.0 (1.7–2.5)*               |
| Female               | 8297                        | 236 (2.8)                       | 1.4 (1.2–1.6)*               | 1.6 (1.2–1.6)*               | 215 (2.6)                     | 1.9 (1.6–2.2)*               | 1.8 (1.6–2.1)*               |
| Public court         |                              |                                 |                              |                              |                                |                                |                              |                              |
| All                  | 5,124                       | 100 (1.8)                       | 10 (10.0)                    | 1.2 (1.0–1.5)                | 1.2 (1.0–1.9)                | 141 (2.6)                     | 14 (9.9)                     | 2.3 (1.9–2.8)*                   | 2.1 (1.7–2.5)*                   |
| Male                 | 2,840                       | 39 (1.4)                        | 1.4 (1.0–1.9)                | 1.4 (1.0–1.9)                | 32 (1.1)                      | 1.7 (1.1–2.4)**              | 1.5 (1.0–2.3)**              |
| Female               | 2,684                       | 61 (2.3)                        | 1.1 (0.8–1.4)                | 1.1 (0.8–1.4)                | 109 (4.1)                     | 2.6 (2.1–3.3)*               | 2.3 (1.9–2.9)*               |

HR: hazard ratio; CI, confidence interval.
a. History of anxiety in those with a diagnosis following court proceedings.
b. Adjusted for previous history (ever) of anxiety and depression.
c. History of depression in those with a diagnosis following court proceedings. Numbers not provided for males and females separately owing to the small numbers (disclosure risk).
d. Adjusted for previous history (ever) of depression and deprivation.

* P < 0.001; ** P < 0.05.

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Fig. 4 Adjusted incidence rate ratios (IRRs) of anxiety and depression for children and young people involved in private and public law proceedings.
nature of these or profiles of those involved in single or repeat cases. Similarly, we have not examined legal outcomes for those involved in public law proceedings, which may, for example, involve an order for permanent removal from parents and varying placements, such as placed for adoption. For the small proportion of participants who were adopted, NHS registration numbers will also have changed and will therefore have been lost to follow-up. The circumstances of the different orders can clearly have a wide-ranging impact on emotional health. Further analyses are therefore warranted to understand the impact of court involvement in greater depth. Acquisition of further data-sets from local authorities (such as social services) with linkage to existing data within the SAIL Databank will facilitate this future research.

**Comparison with previous literature**

Recent evidence linking health and Cafcass Cymru records reports on heightened mental health problems of mothers involved in public law proceedings; no previous large-scale studies have used routine administrative data to examine or compare similar problems experienced by CYP involved in public or private family court proceedings across Wales.

Based on other study types, there is more robust evidence that parental conflict that is frequent, intense, poorly resolved and about the child is associated with multiple negative outcomes for children. Bream et al. reported high levels of distress among children involved in parental disputes regarding child arrangements and, based on Cafcass welfare records for private family law proceedings, Macdonalda reports on a lack of consideration of children’s accounts in court recommendations and therefore failure in the system to identify those at risk for mental health problems.

Investigating the impact of public law proceedings on mental health, Fumaluro et al. showed that post-traumatic stress disorder in children (aged 6–12) was correlated with other anxiety and psychotic disorders and presence of suicidal ideation. Hunt et al. assessed outcomes for abused and neglected children placed in kinship care (with family or friends); more than half were manifesting emotional or behavioural difficulties. Mulcaya et al. also examined change in children’s adaptation and well-being after care proceedings; although this improved, resolving the impact of maltreatment remained a complex ‘work in progress’. Ford et al. combined data from Meltzer and colleagues’ surveys of looked after British children (children looked after by local authorities) and of British children in private households and found higher levels of psychiatric disorder in children in local authority care and, a more recent survey of young people in care in Wales reports lower well-being than those not in care, with those in residential care having the lowest well-being scores.

Mental health problems are of growing concern and account for a large proportion of the disease burden in young people generally; findings from the 2017 population-level survey of child and adolescent mental health in England estimated that that 1 in 12 (8.1%) 5- to 19-year-olds had an emotional disorder such as anxiety or depression; rates also increased with age, and the disorders were more common in girls and among those living in households with the lowest household incomes. Our estimate of just over 4% for anxiety and depression reflects our calculation of incidence (new cases), inclusion of younger children and, of course, CYP who presented to health services for these problems rather than self-reported estimates.

**Implications**

Further work is needed to capture the full range of mental health difficulties experienced. A better understanding of substance misuse and other problems (such as self-harm) will contribute to a better understanding of the scale and depth of problems, which the family courts must take into account during proceedings and in child placement beyond proceedings. Children’s mental health needs are a significant factor in placement stability/instability. Further, to complete the picture, future research should examine associations in the opposite direction, i.e. the impact of having a child with mental health problems on parental conflict, separation and, for those who cannot agree on child arrangements, private law applications.

Welsh Government is committed to mental health support for CYP. Progress is being made with schools embedding health and well-being into the curriculum and adopting a whole-school approach to support pupils. Although this may capture vulnerable CYP involved with family courts, they may also benefit from improvements within health and local government (including social services). The capacity of local primary mental health support services remains a significant concern in terms of both access to crisis and out-of-hours services across Wales and, more generally, limited support/treatment options for CYP who need help but do not meet the threshold for specialist mental health or neurodevelopmental services. The Social Services and Well-being (Wales) Act 2014 requires social care and health professionals to work together to support the needs of these vulnerable CYP. Careful thought therefore needs to be given to how the system impacts on children already experiencing heightened vulnerability and in particular whether there is a way for the system to act as a gateway to appropriate support in situations where these issues are identified. Greater mental health assessment of CYP throughout their journey in the family justice system is required, as is more training and more effective sharing of information to help services and organisations work together.

Although the overall trend in the volume of private law applications has been modestly upwards over the past decade, there has been a steeper rise in public law applications, particularly care proceedings. This increase in family court cases means that increasing numbers of vulnerable CYP are at risk of depression and anxiety.

**Supplementary material**

Supplementary material is available online at https://doi.org/10.1192/bjo.2022.6.

**Data availability**

The data used in this study are available from the Secure Anonymised Information Linkage (SAIL) Databank at Swansea University, Swansea, UK, which is part of the national e-health records research infrastructure for Wales. Those wishing to access data should follow the application process guidelines available at: www.saildatabank.com/application-process.

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Author contributions

All authors contributed to the conception and design of this work. J.M. performed the analysis under A.J’s supervision, with L.J.G., R.D.J. and A.J. interpreting the results. T.P. conducted the literature review for this manuscript. L.J.G. drafted the first iteration of the manuscript. All authors critically reviewed the manuscript, provided important intellectual input, approved the final version and agreed to be accountable for their contributions.

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Declaration of interest

None.

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