

Public Health Case study:**Authors:****Corresponding Author: Dr Emily Player, GP, Norwich**

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Purpose:

Homelessness can be characterised by tri-morbidity, which is the combination of substance misuse, physical ill health and mental ill health (Player 2019). It is widely known that despite the NHS being set up to provide access to healthcare for all, access and provision is inequitable (Hart Tudor 1971). Two recent papers on health inclusion found that those from socially excluded populations had a mortality rate 8 times higher for men than the average and 12 times higher for women (Luchenski et al. 2018), (Aldridge et al. 2018). This increase in mortality in those who are socially excluded such as homeless patients is contributed to by the complex impact of tri-morbidity and social circumstances. Considering a life course perspective for individuals living with tri-morbidity is important. A life course approach refers to the protective factors and risk factors we are exposed to over a life course and how this may impact our morbidity and mortality in later life (Hertzman et al. 2001). This approach can help better understand the impact negative life events can have and where intervention may be helpful (Kuh et al. 2003). In the case of homelessness, multiple negative life events may accumulate in a short space of time with limited personal and professional resources to help manage them or allow recovery, leading to further risks and negative life events. This spiralling of negative life events over time may help explain the higher mortality rates for those who are socially excluded (Rashbrook

2019). However, they provide an opportunity for system changes to enable better outcomes for such individuals. The aim of this case report is to shed light on the current public health crisis of mental health and homelessness and to consider how a life course approach may be a useful part of a response to this crisis.

Approach

This case study highlights the current crisis of homelessness and mental health in the UK and specifically the East of England. Mortality data for homeless deaths in the United Kingdom (UK) and the East of England are those reported by the Office of National Statistics (Butt & John 2019). One specific case is detailed but anonymised, by changing some of the identifiable information but not the essence of the case, (Smith 2008) to highlight the life course of an individual living with tri-morbidity, and describe a pathological level of negative life events. The complexity of health and social care required for such individuals, and potential opportunities for service involvement and multidisciplinary working which may help to change the trajectory of such individuals' life courses are discussed (Rees 2009).

National Data

There were an estimated 726 deaths of homeless people in England and Wales registered in 2018, the highest year-to-year increase (22%) since the time series began, and 88% of this total were male (Butt & John 2019). The mean age at death for homeless people was 45 years for males and 43 years for females in 2018, compared to the general population of England and Wales in which the mean age at death was 76 years for men and 81 years for women (Butt & John 2019). Two in five deaths of homeless people were related to drug poisoning in 2018, and the number of deaths from this cause has increased by 55% since 2017 (Butt & John 2019). In the East of England the number of homeless individuals made up between 10-15% of the national number over the last 10 years. It is estimated that there were 56 deaths of homeless people in the East of England in 2018 (Butt & John 2019). Larger cities such as London, Birmingham and Newcastle-upon-Tyne have the highest mortality rates.

Mental health and homelessness

In 2009 Crisis issued a report on mental health and the homeless population (Rees 2009). Whilst it is difficult to illicit exact statistics on this topic, due to poor coding and presentation to health services, it is clear there is an increase in mental health diagnoses in the homeless population (Thomas 2012), (White & Maguire 2019). The report suggested that a homeless individual was twice as likely to have a diagnosis of mental health problems than someone in the general population and that psychosis was 4-15 times more likely (Rees 2009). Those who are street homeless carried a higher risk for psychotic

illness at 50-100 times that of the general population (Rees 2009). Alcohol and substance misuse were more likely to be seen in those homeless individuals with severe mental illness. All the above i.e. those with significant tri-morbidity had a 5 times increased mortality risk compared to their equivalent age in the general population (Rees 2009). However, it is known that of those who are under mental health services for psychosis, very few are homeless (Rees 2009). Thus, there is a discrepancy between what is known to be a significant health issue and what specialist help is being received. A review on suicides in the UK in 2011 reported that only 25% of those who die from suicide were under the care of mental health services despite mental illness being commonly associated with suicide (Windfurh & Kapur 2011). Between 1 and 3% of suicides in this report were homeless individuals. At points of last contact with services, such individuals reported emotional distress, physical illness, increased substance misuse and self-harm (Windfurh & Kapur 2011). It was suggested that outreach services and the voluntary sector could help address engagement with mental health services to improve outcomes for such individuals.

Case Summary

This is the history of a young adult homeless man with increasing levels of distress, possible developmental disorder, history of trauma, he was repeatedly assessed by multiple services including Community NHS Trust, Multi-agency Consortium (Council, Health, Housing Trust, DWP & Shelter), Early Intervention Team (Mental Health (MH) Trust), Crisis Resolution and Home Treatment team (MH Trust) and Criminal Justice Liaison (MH Trust). He was not provided with any ongoing specialist care or treatment that he was able to engage with. There appeared to be a lack of clear formulation and multi-agency discussions and care plans up until the point of discharge from the MH Trust. Unfortunately, the patient died because of suicide in his early 20s. In the months prior to his death he presented frequently to a vulnerable adult service, specialising in care for those who live with tri-morbidity. At these appointments he engaged but struggled to find the words to communicate his symptoms which had, in other settings, presented as anger outbursts. During his last appointment he was unable to carry out all activities of daily living except for showering and waiting for help. Referrals were made to mental health teams but following assessment evidenced based treatment plans were put in place, treatments involved group therapy which the patient was unable to attend due to mental health symptoms, therefore he was discharged from secondary care services.

Figure 2: Case History: from a life course perspective

Pre- conception: Mother had alcohol dependency, it is unknown whether there was alcohol consumed when patient was in utero

Childhood: Parents separated at a very young age, mother continued to live with alcohol dependency

Adolescence: Patient used a variety of substances from the age of 15 including cannabis, amphetamines, ketamine, cocaine and briefly smoked heroin.

He experienced a parental bereavement and following this resided with an aunt

It is unclear what service input was in place until the age of 18

Early Adulthood:

18 years- diagnosis of depression and anxiety

19 years- brief interaction with drug and alcohol services

19 onwards- worsening mental health, 3 inpatient admissions and diagnosis of psychosis and pervasive developmental disorder

End phase of life:

12 referrals from primary care and police services to mental health services were made in the last 4 years of his life.

Medications: More than 2 medications for mood psychosis and depression were prescribed and were reported to have helped. During the last 3 months of his life, urinary drug screening and alcohol breathalyser tests were normal.

At the time of his death he was awaiting a social care assessment, was under probation and was not under the care of the mental health team (unfortunately the patient discharged 1 month prior to death due to non-engagement of group therapy and it was felt that psychotic symptoms were related to substance misuse and low mood related to the need for stable accommodation, so no input from the mental health team indicated).

Indications that early negative life events impacted this patient:

- Poor ability to carry out basic activities of daily living such as meeting nutritional needs (BMI 18)
- Limited access to basic needs, lack of housing, food and emotional support
- Difficulty regulating emotions, paranoid thoughts and thoughts and acts of self-harm
- Social withdrawal
- Limited ability to assess risk, impulsive behaviour and hazardous behaviour

What worked well:

Support from specialist services including the vulnerable adult service and mental health team created some periods of stability and prescribed medication was reported to help. Providing a safe and familiar place to wait for help and time to help understand the patient's perspective and level of distress. Continuity of care with outreach workers and vulnerable adult service team.

Discussion:

This is an upsetting case which makes for difficult reading, however, it highlights that much can be reflected on and hopefully learnt, such as altering the approach to cases of tri-morbidity and better understanding it. Applying the life course approach to this, the first area of complexity surrounds preconception and maternal health (Smith et al. 1998). Ensuring input from services to manage complex substance misuse and alcohol dependency in pregnancy would be important in this case and recognising the impact of alcohol dependency in the unborn child and following birth is essential.

Adverse childhood events (ACEs) are now more widely recognised in the forum of child health and development. A recent systematic review suggested ACEs have a significant impact on physical and mental health along with health outcomes (Hughes et al. 2017). The evidence suggests that four ACEs compared with none was associated with increased risk of poor outcomes, and the strongest associations were with severe mental health, risky sexual behaviour, drug and alcohol misuse and self-directed violence (Hughes et al. 2017). The review suggested ways to intervene during childhood and the aim of education, policy and prevention to incorporate a life course approach (Hughes et al. 2017). Child safeguarding training for healthcare and educational providers has introduced this concept. Education for families and support where ACEs occur is important (Smith et al. 1998).

Moving into adolescence and early adulthood there is a sense of health exclusion and not health inclusion in this case. The patient was discharged from mental health services for non-engagement but struggled to engage using traditional planned appointments and following rigid guidelines for evidence-based care of group therapy. The patient struggled to engage with healthcare and with other services such as probation, often due to an inability to 'speak the medical language' displaying symptoms through anger not words. He was also frequently excluded from services due to his substance misuse which was not active, when tested, during the end stages of his life. Dual Diagnosis Guidelines advise: 'Do not exclude adults and young people with psychosis and coexisting substance misuse from age-appropriate mental healthcare because of their substance misuse' (Megnin-Viggars et al. 2015). For most adults with psychosis and coexisting substance misuse, treatment for both conditions should be provided by healthcare professionals in secondary care mental health services, such as community-based mental health teams. The guidelines also advise seeking specialist advice and initiating joint working arrangements with Specialist Substance Misuse Services if the person's substance misuse is difficult to control or leads to significant impairment of functioning, family breakdown, or significant social disruption such as homelessness.

With such a condensed amount of negative life events in a short life span, time is a main factor in considering the approach to better managing such complexity. For example, providing prompt care, assessments and interventions at the right time by the right team is important. The longer negative events go untreated the more entrenched poor coping mechanisms become and the greater distrust with services. A recent Kings Fund report highlights some of the strategies in place to tackle health outcomes for those who are sleeping rough, which has become a worsening problem for the UK since 2010 (Cream et al. 2020). The report emphasises the complex needs and that a generic approach to healthcare alone is not adequate. The focus is on engagement with those sleeping rough, providing a workforce which is multifaceted and able to go above and beyond to deliver care, prioritise relationships and continuity and consider the local needs (Cream et al. 2020).

The government has provided funding for specialist mental health nurses in this area. The Kings Fund report recognises that small changes to interventions and approaches can make significant differences for the individual (Cream et al. 2020). This was also suggested as a specific intervention for the homeless population in the suicide review, that outreach work and voluntary sector workers could promote engagement with individuals to help them access mental health support (Windfuhr & Kapur 2011). The Pathway model is used in many areas in the UK to provide outreach services in unique ways, joining up many voluntary organisations to provide coordinated care and opportunities of engagement for individuals experiencing homelessness (Clowes et al. 2017). The Pathway charity was founded in 2009 and works with the NHS in the UK to help improve healthcare through inclusion health, policy and training, including a specific mental health assessment tool for rough sleepers, prompted by a serious adult case review (Clowes et al. 2017).

Conclusion:

There is an epidemic of homelessness with the average age of mortality for those living on the streets reducing year on year. None of the approaches or concepts discussed above are new, and all aim for patient centred care with the right people at the right time and cohesive working amongst health and social care. However, in those patients who are most vulnerable the efforts needed to achieve and maintain this are greater, but the potential outcome changes to the individual and society are also greater. Going above and beyond to re-engage individuals and build relationships is an important role for healthcare professionals, particularly where trauma and distrust of people and services, and often level of chaos, are potential barriers. Basic engagement strategies and building rapport are the initial work that is often under-valued and it is often this that can support people to be able to engage in

later psychological work. Moreover, once there is a level of engagement, to recognise that patients have lived extraordinary lives, often unable to speak the medical language or to be funnelled into diagnoses and treatment plans, that an extraordinary approach to diagnosis and treatment is crucial, and one which all agencies are signed up to, to provide true holistic care.

It is important to follow legislation and guidance on health inclusion to support vulnerable adults. The Ministry of Housing Rough Sleeper Strategy (2018) states: 'We will work with Safeguarding Adult Boards to ensure that Safeguarding Adult Reviews (SARs) are conducted when a person who sleeps rough dies or is seriously harmed as a result of abuse or neglect, whether known or suspected, and there is concern that partner agencies could have worked more effectively to protect the adult. Lessons learned from these reviews will inform improvements in local systems and services' (White & Maguire 2019). This provides an opportunity to reflect on cases such as the above and ensure that which can be changed takes place and that agencies can safeguard against such tragedy in the future.

Homeless Link: Taking action following the death of someone sleeping rough (2017). Briefing for Homeless Services makes recommendations that: 'As much work is done to prevent the deaths of people sleeping rough by voluntary and statutory agencies responsible for safeguarding and supporting vulnerable people'. Processes for local SARs should be followed and 'the death of a person who is homeless should always result in a review even if this is not a Safeguarding Adults Review.' (Prestidge 2017).

Finally, considering a life course perspective, reviewing a patient history, and the impact of negative life events and ACEs is essential when identifying risk of mortality from homelessness. Each negative life event provides an opportunity for professionals to step in and help, something this individual was seeking. Services for vulnerable adults require complex multidisciplinary working and support if this epidemic is to be tackled. The Pathway charity model can certainly help address some of these challenges which are currently faced by health services and individuals trying to access help (Clowes et al. 2017). In this case, poor engagement highlights the vulnerability of the individual and therefore the need to work harder to engage such patients, as this can, and does, make a difference.

Originality

This is an original piece of work with real cases discussed but anonymised according to the British Medical Journal (BMJ) guidance on reporting death case reports (Smith 2008). The authors were unable to contact the individuals next of kin but attempts were made to further anonymise the case,

so it is not traceable to the individual.

References:

Aldridge RW, Story A, Hwang S et al. (2008), *"Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis"*, The Lancet, Vol. 391, No. 10117, pp. 241-250.

Clowes E, Timms P, Bax A et al. (2017), *"Mental health service assessments for rough sleepers, tools and guidance"*, Pathway

Cream J, Fenney D, Williams E et al. (2020), *"Delivering health and care for people sleeping rough, going above and beyond"*, The Kings Fund

Butt A, John E, (2019), *"Deaths of homeless people in England and Wales: 2013-2018"*, Office for National Statistics

Hart, J. (1971), *"The Inverse Care Law"*, The Lancet, Vol. 297, No. 7696, pp. 405-412

Hertzman C, Power C, Matthews S, et al. (2001), *"Using an interactive framework of society and life course to explain self-rated health in early adulthood"*, Social science & medicine, Vol. 53, pp. 1575-85.

Hughes K, Bellis M A, Hardcastle K A, et al. (2017), *"The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis"*, The Lancet, Vol. 2, No. 8, pp. 356-366

Kuh D, Ben-Shlomo Y, Lynch J, et al. (2003), *"Life course epidemiology"*. Journal of Epidemiology and Community Health, Vol. 57, pp.778-83.

Luchenski S, Maguire N, Aldridge R, et al. (2018), *"What works in Inclusion Health: overview of effective interventions for marginalised and excluded populations"*, The Lancet, Vol. 391, No. 10117, pp. 266-280.

Megnin- Viggars O, Brown M, Marcus E et al. (2015), *"The epidemiology, and current configuration of health and social care community services, for people in the UK with a severe mental illness who also misuse substances A systematic review"*, The National Institute for Health and Care Excellence

Player E, Gure-Klinke H, North S, (2019), *"Humanising Medicine: teaching on tri-morbidity using expert patient narratives in medical education"*, Educ Prim Care, Vol. 30, No. 6, pp. 368-374

Prestidge J, (2017), *"Taking action following the death of someone sleeping rough"*, Homeless Link

Rashbrook E, (2019), *“Health Matters: Prevention- a life course approach”*, Public Health England

Rees S, (2009), *“Mental ill health in the adult single homeless population. A review of the literature”*, Crisis & Public Health Resource Unit

Smith GD, Hart C, Blane D, Hole D. (1998), *“Adverse socioeconomic conditions in childhood and cause specific adult mortality: prospective observational study”*, BMJ, Vol. 316, pp. 1631-5.

Smith J (2008), *“Patient confidentiality and consent to publication”*, BMJ, Vol. 337, a1572

Thomas B, (2012), *“Homelessness Kills: An analysis of the mortality of homeless people in early twenty-first century England”*, Crisis

White J, Maguire E, (2019), *“Rough Sleeping Statistics: Autumn 2018, England (revised)”*, Ministry of Housing, Communities and local government

Windfuhr K, Kapur N, (2011), *“Suicide and mental illness: a clinical review of 15 years findings from the UK national confidential inquiry into suicide”*, British Medical Bulletin, Vol. 100, No. 1, pp. 101-121