

Zero Hours Contracts and Mental Health:

What the evidence tells us

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Summary

Many of us spend the majority of our waking hours at work, so it is important that our workplaces support our mental health and wellbeing.

An area of work which has attracted increasing controversy is Zero-Hours Contracts (ZHCs). ZHCs are 'atypical' employment contracts that are not legally defined in law in the UK. Such contracts do not guarantee any hours of work, and workers are only paid for work carried out¹, although good practice is for employers to provide the employee with a contract setting out exactly how the ZHC will work². There has been a dramatic increase in the number of people employed on ZHCs in the UK in recent years, accounting for nearly

three per cent of all those in work (1 million people) as of September, 2021³.

It is now well known that work which is poorly paid and insecure in general is associated with poor mental wellbeing⁴. However, there is limited research on the mental health effects of ZHCs. If these contracts are associated with poorer mental wellbeing, it is important that we understand why this association occurs. This report provides a summary of the current evidence which exists on the mental health effects of ZHCs.

A review of the scientific literature was conducted searching for any studies published in the English language, which explored the effects of ZHCs on mental health.

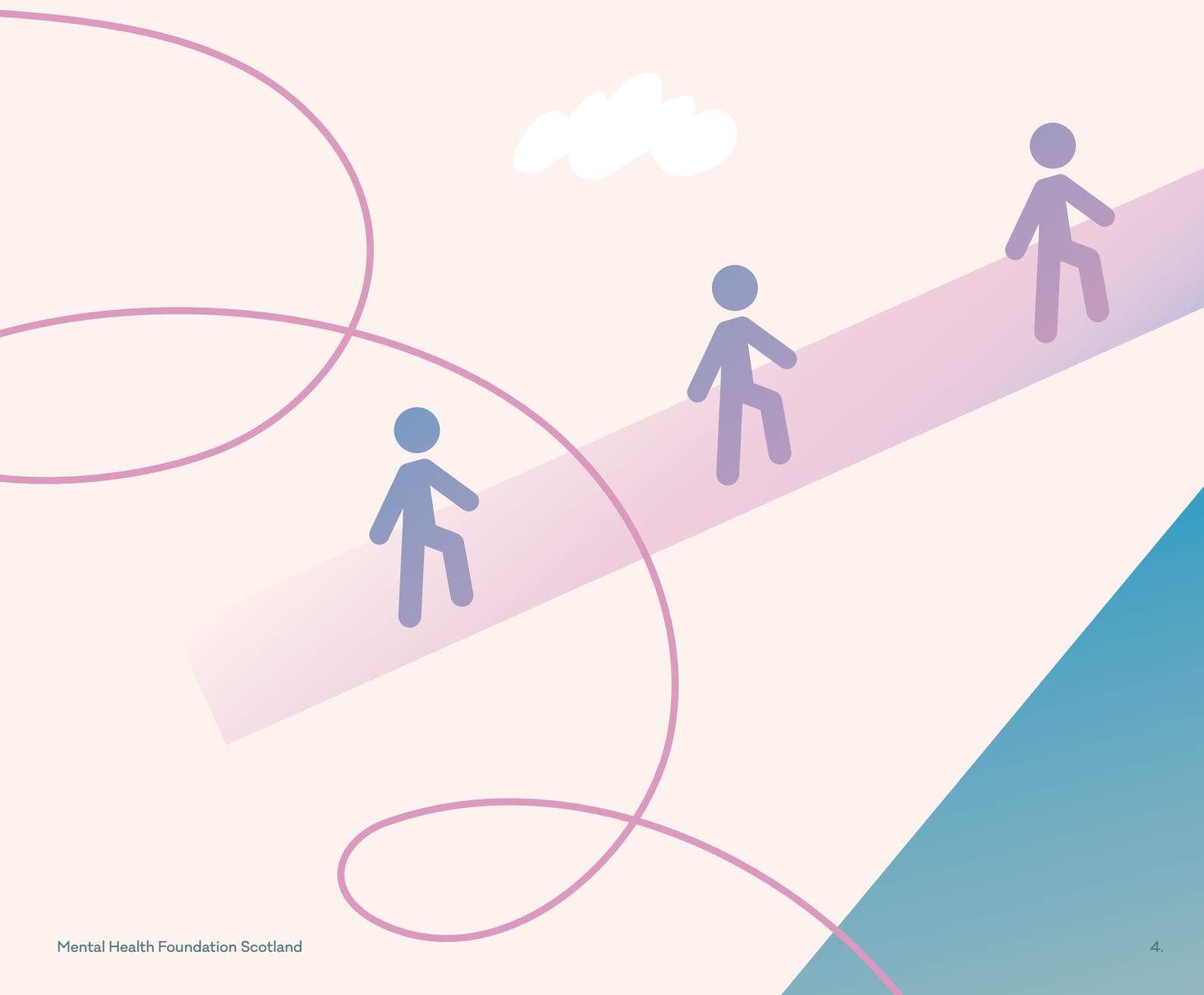
Key findings:

- **Being employed on a ZHC is highly associated with self-reports of poor mental wellbeing. Of the 17 studies we found which explored this, eight concluded there was a significant association between ZHC employment and reporting a mental health difficulty.**
- **More research is needed to determine definitively whether or not ZHCs are a cause of mental health difficulties, and if so, why this is the case.**
- **There is evidence to suggest that low pay and feelings of powerlessness and uncertainty surrounding people's hours of work are factors of potential significance in driving poor mental health and wellbeing among people on ZHCs.**

The government has a role to play in protecting the mental health of workers in all forms of employment.

We recommend:

1. Funding should be directed toward further research to explore the association between precarious work and mental health difficulties generally, and between ZHC contracts and mental health difficulties in particular.
2. The UK Government should introduce legislation to reduce precarity and poverty in all forms of employment. Such legislation should be used to introduce new rights to more secure work for all those in employment.
3. The Real Living Wage should be the normal minimum wage paid to employees.



Introduction

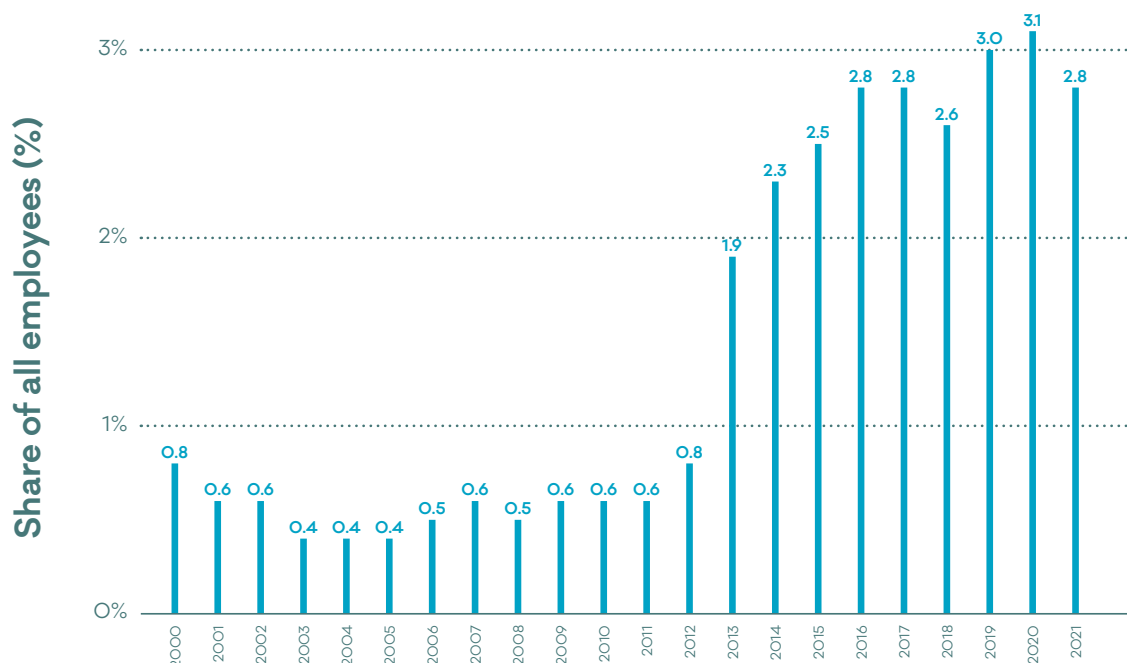
Many of us spend the majority of our waking hours at work, so it is important that our workplaces support our mental health and wellbeing. However, we know that for a lot of us, work is a primary cause of stress.

In a UK population survey conducted for the Mental Health Foundation in 2018, a third of respondents reported feeling stressed about work in their personal time, and a quarter reported having compromised their health because of work, while 16% reported having compromised relationships⁵.

An area of work which has attracted increasing controversy is Zero-Hours Contracts (ZHCs).

ZHCs are 'atypical' employment contracts that are not legally defined in law in the UK. Such contracts do not guarantee any hours of work, and workers are only paid for work carried out⁶, although good practice is for employers to provide the employee with a contract setting out exactly how the ZHC will work⁷. There has been a dramatic increase in the number of people employed on ZHCs in the UK in recent years. Although estimates vary, according to the UK Office for National Statistics (ONS) the number of workers on a ZHC as their main source of employment has steadily climbed from accounting for less than 0.5 percent of those employed in 2006 to accounting for nearly three per cent of all those in work as of 2021⁸. This equates to around 1 million people.

Fig. 1 Percentage of people in employment on a zero-hours contract in the United Kingdom from 2000 to 2021 (Clark, 2022)⁹



Supporters of flexible working hours arrangements argue these contracts offer flexibility for workers, as they can choose when and how much they work. As such, it is suggested it is form of employment which is attractive to students and those with caring commitments. There have also been arguments that ZHCs are an important factor in keeping unemployment at a minimum.

However, in reality, only a small proportion of those on ZHCs are students. In general, they are more commonly held by women, people with disabilities, people from minority ethnic groups, or people from lower socioeconomic backgrounds^{10,11}; all demographic groups that are known to be disadvantaged in the labour market. ZHCs afford these workers very few employment rights, as these contracts allow employers to designate individuals as 'workers', rather than 'employees', and afford them fewer entitlements and protection^{12,13}. They are also overwhelmingly associated with low pay, limited hours and under-employment. Research has found that workers on ZHC's earn 7 per cent less annually than similar workers doing similar jobs, but with regular contracted hours¹⁴. On average, ZHC workers work 10 hours less per week than those in other forms of employment¹⁵.

It is now well known that work which is poorly paid and insecure in general is associated with poor mental wellbeing¹⁶. However, the mental health effects of ZHCs in particular remain largely unknown, although some evidence is available. In addition, if these contracts are associated with poorer mental wellbeing, it is important that we understand why this association occurs. This information is needed to make the changes which will protect these workers' mental health.

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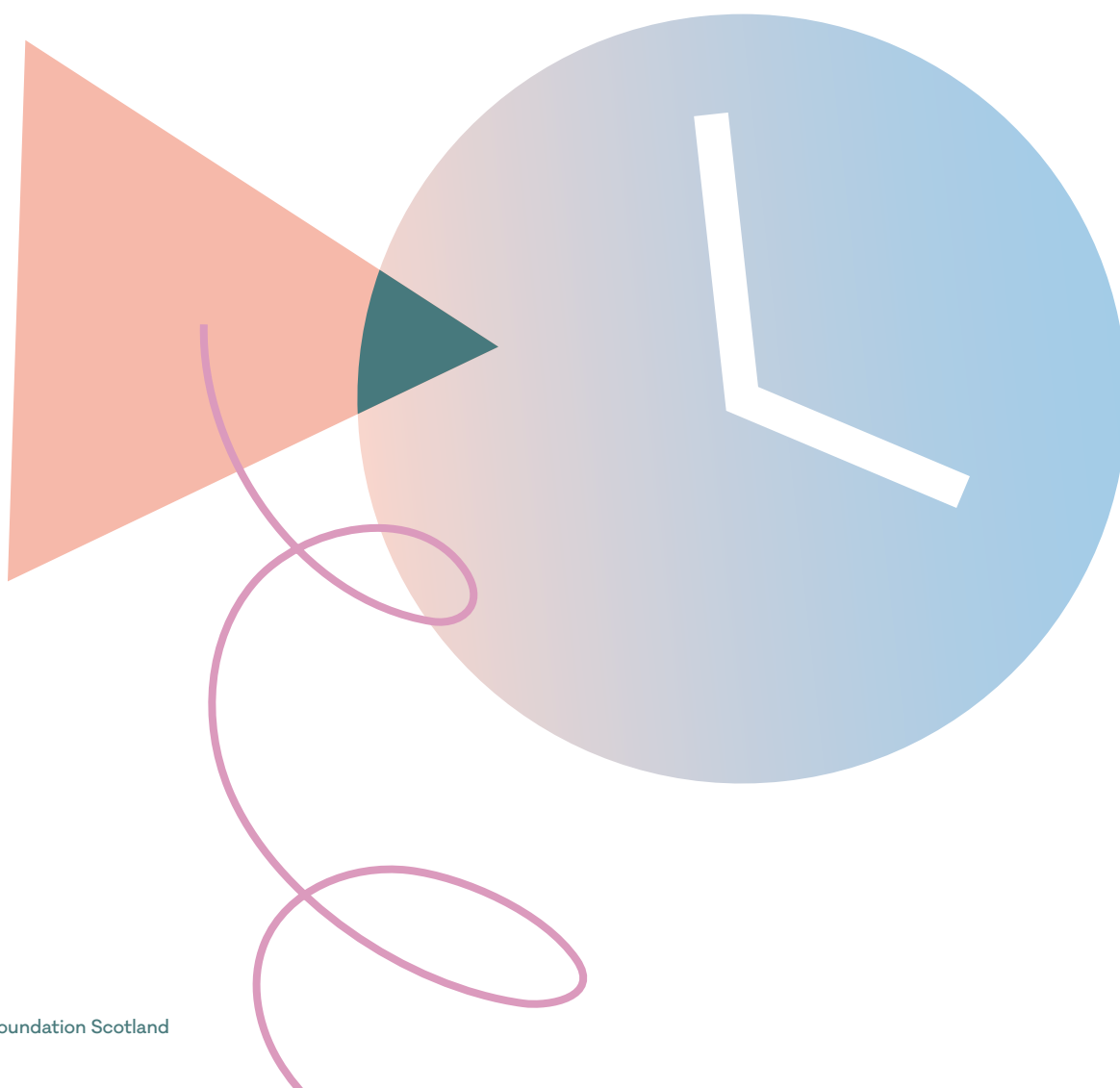
Methods

A review of the scientific literature was conducted searching for any studies published in the English language, which explored the effects of Zero-Hours Contracts (ZHCs) on mental health. Seven databases were searched (Medline, PsycINFO, EMBASE, CINHAL, Business Source Empire, Econlit and Web of Science (Core Collection)). This was supplemented by a manual review of reference lists from eligible publications, Google Scholar and review articles.

We defined ZHCs as any employment contract under which an individual is not

guaranteed any minimum hours of work and is paid only for work carried out. However, papers which included any form of mental health or wellbeing outcome were deemed eligible for inclusion.

The papers which were identified were screened by two reviewers to determine if they were suitable to include. They were also systematically appraised to determine their overall quality. Their results were subsequently extracted and grouped according to how ZHCs were thought to impact upon mental health.



Results

Mental Health Effects

Through our literature search, we identified 17 studies, conducted in six High-Income Countries, which explored whether any association between mental health or wellbeing and being employed on a ZHC exists.

Eight of these studies identified a significant association between being employed on a ZHC and reporting mental health difficulties or experiences of low wellbeing^{17, 18, 19, 20, 21, 22, 23, 24}. Four of these were conducted in the UK and used large surveys of the general population to demonstrate a significant association between being a ZHC worker and reporting a mental health difficulty or symptoms indicative of this (Table 1). For example, two of these studies were conducted amongst 25-year-olds in the UK. One of them found that at the age of 25, being employed on a zero-hours contract increased the odds of reporting a mental health condition by 44% compared with those who had regular contracted hours, regardless of the individuals' previous level of education or their overall income¹¹. The other study also found that the risk of reporting a mental health difficulty amongst those on a ZHC at the age of 25 was not influenced by their mental health status in adolescence¹². This is significant: given that the majority of mental health difficulties arise before the age of 25, it suggests that for some of these young workers being on



a ZHC may have been the cause of their mental health difficulties. A further study also found that amongst a large number of adults of all working ages in the UK, those who were employed on a ZHC were 40 per cent more likely to report experiencing poor mental health than those who were on any other form of contract²². The authors of this study report substantial effects of ZHCs on long-term health conditions, driven largely by mental health.

Three of the studies we identified produced results which were more difficult to interpret. For example, one found that an association between being employed on a ZHC and

Table 1. Summary of Included Studies

Study author	Country	Number of People on ZHCs Included	Overall Mental Health Effect	Driving Factors Explored
Apouey, Roulet, Solal & Stabile, 2020.	France	52 adults employed on ZHCs	Not Determined	Precarious Hours
Beckman et al. 2021	USA	100 app-based drivers	↓	Limited Peer Support
Berger, Frey, Levin & Danda, 2019	UK	1,001 Uber Drivers	Mixed	Powerlessness and lack of choice
Farina, Green & McVicar, 2020b	UK	6,625 adults employed on ZHCs	↓	None identified
Felstead, Gallie, Green & Henseke, 2020	UK	2,309 adults employed on ZHCs	↓	Precarious Hours
Gheyoh Ndzi, 2021	UK	36 people on ZHCs	Not Determined	Precarious Hours
Glavin, Bierman & Schieman, 2021	Canada	593 'platform' workers	↓	Powerlessness
Hahn, McVicar, & Wooden 2021	Australia	1,826 adults on casual contracts	-	Low pay
Henderson 2019	UK	387 twenty-five-year-olds on a ZHC	↓	None identified
Keely, 2021	UK	245 adults employed on ZHCs.	↓	Low pay, job satisfaction, powerlessness, precarious hours and job insecurity
Keith, Harms & Tay, 2019	USA	335 amazon-employed gig workers	Not Determined	Powerlessness and lack of choice
MonteroMoraga, Benavides, & LopezRuiz 2020.	Spain	219 adults on 'informal contracts'	Mixed	None identified
Pirani 2017	Italy	443 on 'casual contracts'	↓	None identified
Ravalier, Fidalgo, Morton, & Russell, 2017	UK	80 care-workers on ZHC	Mixed	Powerlessness
Ravalier, Morton, Russell, & Fidalgo, 2019	UK	15 domiciliary workers on ZHC	Not Determined	Powerlessness
Richardson, Lester & Zhang, 2012	Australia	1,771 adults on casual contracts	-	Low pay
Thorley & Cook (2017)	UK	387 twenty-five-year-olds on a ZHC	↓	None identified

reporting poor mental health only existed for women²⁵. Another found that while care workers on ZHCs did not have worse average mental health scores (on a standard assessment measure) than care workers with contracted hours, a higher proportion of them did score levels suggestive of a mental health condition²⁶. Lastly, one study revealed that Uber drivers reported both higher levels of life satisfaction and higher levels of anxiety²⁷. However, this finding may only be true for Uber drivers specifically and cannot be used to make assumptions about ZHC workers as a whole.

Two of the studies did not find any association between being employed on a ZHC and reporting poorer mental health^{28,29}. Both of these studies were conducted in Australia where the protections for ZHC workers are greater than they are in the UK and other High-Income Countries, as later discussed.

Finally, we were not able to determine whether an association between poor mental health and being employed on a ZHC existed in the remaining four studies, as they didn't include a group of people not employed on a ZHC^{30,31,32,33}. However, we chose to include them in this report, as they did explore factors which might partly explain the effects of ZHC employment on mental health and wellbeing, as discussed later.

Overall, it emerged that in High-Income Countries where ZHC workers are afforded little employment protection, an association exists between being employed on a ZHC contract and the likelihood of reporting a mental health difficulty or lower wellbeing.

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Driving Factors

There are lots of factors which may drive the association between poor mental health and being employed on a ZHC. However, our literature review found only 12 papers which looked at aspects of ZHCs that may account for this association. The features they identified are grouped into four key factors as outlined below.

Powerlessness

Feeling powerless in the workplace has long been associated with an increased risk of experiencing mental health difficulties^{34,35}. There are a number of reasons why being on a ZHC may generate feelings of powerlessness. Being afforded fewer employment protections than those on other forms of contract is thought to place ZHC workers in a position of lower control³⁶. This may contribute to greater imbalances of power between management and these workers, compared to those on

other forms of contract. In addition, many ZHC employers use remote monitoring systems to regulate a workforce that is widely distributed across the country. For example, companies have been known to collect detailed data on the behaviour of workers, and to use this data to determine how many hours they are offered in future. Finally, it is known that a large proportion of ZHC workers are on these contracts through necessity rather than choice. All three of these factors may also result in those on ZHCs feeling they hold very little power in their relationship with their employer.

We found six studies that looked at feelings of powerlessness amongst people employed on ZHCs. Four of these studies found that perceptions of powerlessness among ZHC workers may influence their mental health status.^{23,27,31,32} One study used data from a large survey across Canada to reveal that those employed on ZHCs reported significantly higher levels of perceived powerlessness compared with those on other forms of contract. The remaining two studies did not find powerlessness was a significant driving factor in this association.^{17,26} However one of these was a very small study conducted amongst care workers in the UK and it should therefore be interpreted with caution.

Precarious Hours

The feature which most clearly distinguishes ZHCs from other forms of contract, is their lack of guaranteed hours. As a result, the hours offered to and worked by those on ZHC contracts can vary significantly on a week-to-week basis. The uncertainty this creates is thought to be a further factor which may drive their association with mental health difficulties.

Three studies explored whether the uncertainty surrounding their working hours was a further driving factor for mental health difficulties among those on ZHCs.^{21,30,33} Two of these studies were based on interviews with people on ZHCs and both found that the constant uncertainty surrounding if, when, and how much work they would be offered, was a factor that participants frequently referred to as having a significant negative impact on their mental health.^{30,33} In particular, the effect of this uncertainty on their ability to plan, as well as their social and family lives, was identified as a key driving factor for poor mental health.

A further quantitative study used a large nationally representative survey in the UK and found that anxiety about unexpected changes to hours of work was significantly associated with lower levels of wellbeing. This was therefore a factor which was likely to significantly, but not exclusively affect the mental health of those employed on ZHCs, as the authors identified that these feelings were also common among people in other forms of precarious employment.²¹

Lastly, one study explored a range of factors which could account for the effects of ZHC employment on mental health. They found that uncertainty surrounding hours of work was a factor which partially accounted for this, but their results were not statistically significant.¹⁷ The authors expressed that this may be because of the way they measured this uncertainty, meaning further research is required.

Pay and Income Differences

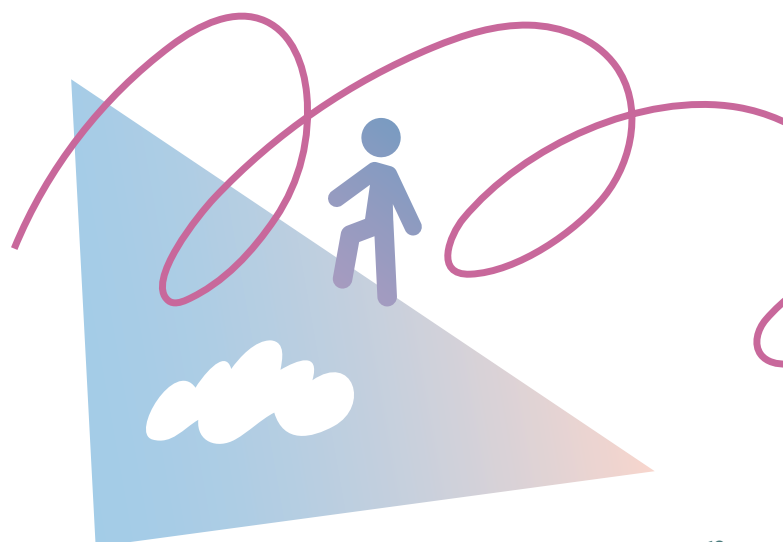
Having a lower income and an unstable income are each associated with an increased risk of experiencing a mental health difficulty.³⁷ Therefore, one of the main ways ZHCs are thought to impact on mental health, is that they are often used for low paid roles and are associated with an unpredictable income. Employees on ZHCs are more likely to be employed in low paying jobs than those on other forms of contract. Furthermore, studies suggest they earn less per hour and are offered fewer hours, even compared with those in similar jobs but with contracted hours.^{38,39}

Two of the studies we found were conducted in Australia, where there is a legal requirement for those on ZHCs to be paid 25% more than the minimum wage an hour. They both found that in Australia, being employed on a ZHC is not associated with an increased risk of reporting a mental health difficulty. The authors of the study therefore concluded that perhaps the increased hourly pay ZHC workers are afforded in Australia reduces the risk of mental health difficulties they might experience.^{28,29}

A further study looked at all the potential factors which may drive the association between ZHCs and mental health difficulties using a large set of data from the UK. The authors found that of all the potential influencing factors they looked at, having an unpredictable income was one of only two which were significant, and the only factor for which alternative explanations could be ruled out.¹⁷

Other Factors

There are many other features of ZHCs which are likely to drive their association with poor mental health and wellbeing. In particular, two of the studies reviewed for this report discussed the role of job satisfaction, whilst a further study discussed the influence of loneliness or a lack of peer support.²⁴ Unfortunately, there were not enough studies which discussed these features to draw conclusions about them as driving factors. The role of other factors, such as stigma, job quality and job security were also under-researched. Further research is therefore needed to determine whether these and other, as yet unidentified, factors may also contribute to the association with poor mental health.



Summary and conclusion

Zero-Hours Contracts have become increasingly common in recent years. If we want to achieve good mental health for all workers, it is therefore important we understand any effects this form of work may have on mental health, as well as how and why these effects occur. Only with this knowledge, will we be able to inform politicians, policymakers and employers of the measures which are needed to protect employees' wellbeing.

We have found evidence that being employed on a ZHC is highly associated with self-reports of poor mental wellbeing. Of the 17 studies we found which explored this, eight concluded there was an association between ZHC employment and reporting a mental health difficulty. Six of these were high-quality, large-scale studies which used surveys of the general population, increasing our confidence in the reliability of their results. Overall, only two of the studies we identified could not find any association between being on a ZHC and reporting poorer mental health. Notably, both these studies were conducted in Australia, where ZHC workers are afforded greater protection, namely through a higher hourly wage (25% higher than the national minimum wage). Unfortunately, all the studies were only able to establish that an association between ZHC work and poor mental health exists.

They were not able to show whether ZHCs cause mental health difficulties, as most of them looked at workers at only one point in time. In addition, most studies compared ZHC contracts with all other forms of contract grouped together. They did not compare ZHC work with other types of low paid, insecure work. More research is therefore needed to determine definitively whether or not ZHCs are a cause of mental health difficulties and, if so, why this is the case, so that action can be taken to address the issues identified.

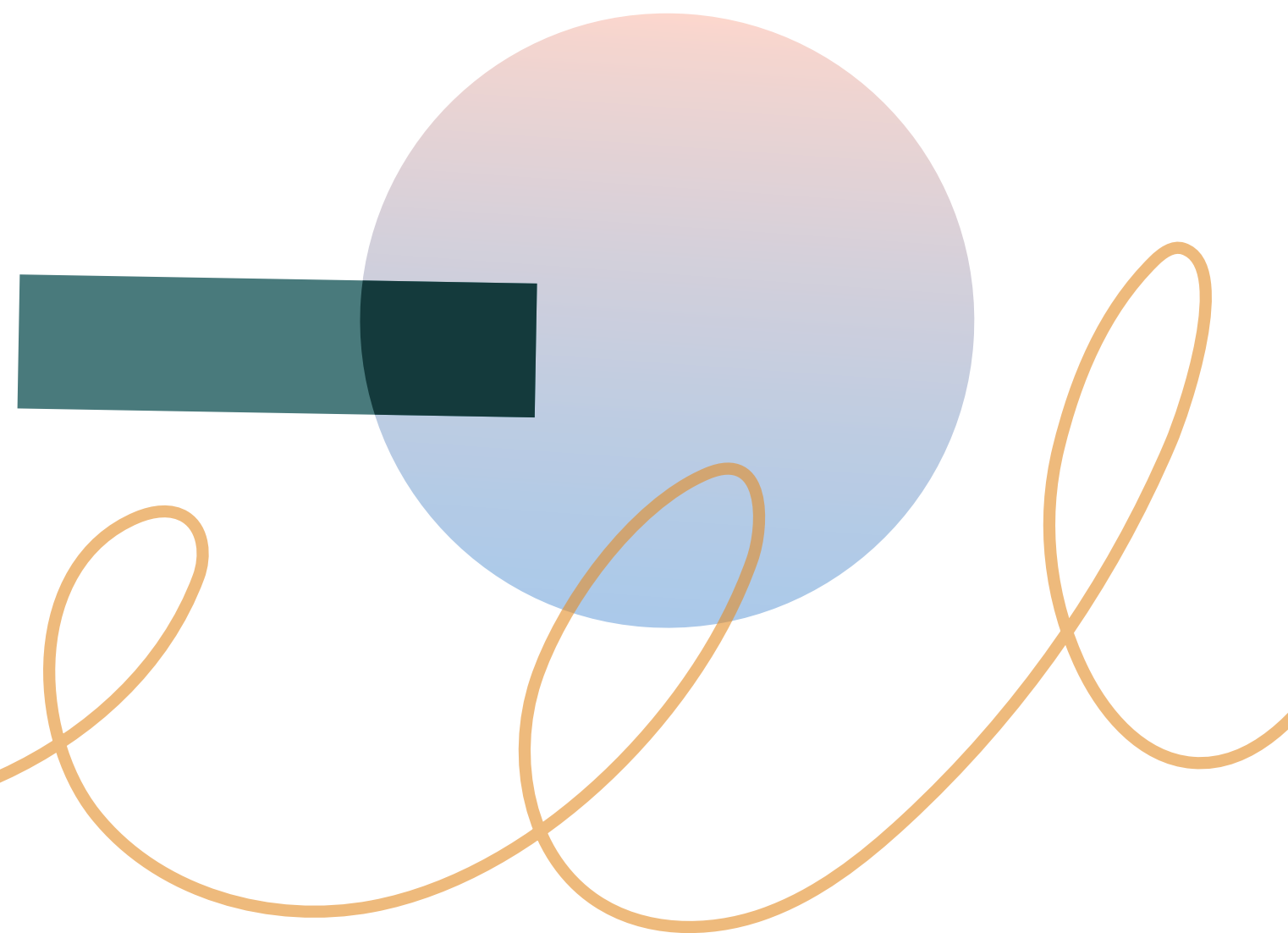
We have found evidence that being employed on a ZHC is highly associated with self-reports of poor mental wellbeing.

There are several different features of ZHCs which might drive their association with poorer mental health and wellbeing. Our review found that there is evidence to suggest that low pay and feelings of powerlessness and uncertainty surrounding people's hours of work are factors of potential significance. These features are not unique to ZHCs, but there are studies to suggest that they are intensified or exacerbated by ZHC workers' employment terms. They are therefore factors which must be carefully considered in formulating any policy response, and by employers who use such contracts.

The government has a role to play in protecting the mental health of workers in all forms of employment. As a result, in some countries ZHCs have now been banned, and there have been calls for the UK Government to follow suit. Others argue that ZHCs are an important factor in keeping unemployment low, and that banning these contracts may not solve the problem. They therefore argue that we should instead offer these workers more rights, such as an increased hourly wage or a minimum number of guaranteed hours. Either way,

Action is needed to better understand the association between ZHCs and poor mental health, and to curb any adverse mental health effects.

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Our policy recommendations

We recommend:

1. Research funding should be committed to explore the links between precarious work and mental health difficulties with a specific focus on the impact of ZHC contracts. This research should be longitudinal in nature with the aim of establishing causality. It should also compare ZHCs with other forms of precarious employment and simultaneously investigate a range of potential mediating factors.
2. The UK Government should introduce legislation to reduce precarity and poverty in all forms of employment. Such legislation should be used to introduce new rights to more secure work for all those in employment.
3. The Real Living Wage should be the normal minimum wage paid to employees.

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