



Good jobs, bad jobs, and ‘deaths of despair’

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The analyses, conclusions, opinions, and statements expressed herein are solely those of the study team and do not reflect those of the MLITSD. No endorsement is intended or should be inferred.

Publication

If you'd like to learn more about our study, the following publication is publicly available and free to read.

Andreacchi A, Fuller A, Blair A, Smith P, Carnide N, Harris MA, Pabayo R, Siddiqi A, Smith B, Shahidi FV. **Employment quality and suicide, drug poisoning, and alcohol-attributable mortality.** American Journal of Epidemiology. 2025. In press.

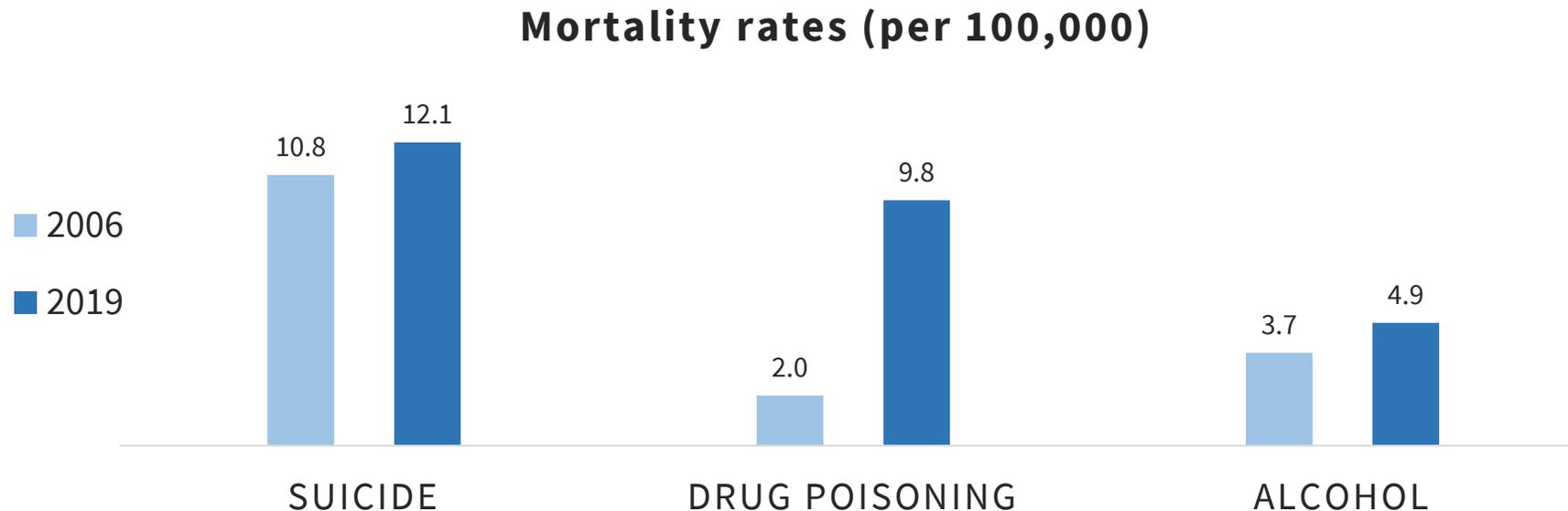
<https://doi.org/10.1093/aje/kwaf018>

Key messages

- **Quality of employment matters** when it comes to understanding ‘deaths of despair’.
- Workers in **precarious employment** experience particularly high rates of suicide, drug poisoning, and alcohol-attributable mortality.
- Employment quality may be a **promising ‘upstream’ intervention target** for the prevention of suicide, drug poisoning, and alcohol-attributable deaths.
- Policy strategies should focus not only on creating more jobs, but also on **ensuring that the jobs we create are of good quality**.

Background

- Life expectancy has stopped rising in Canada.
- This trend predates the pandemic and is driven in part by a pattern of **increasing suicide, drug poisoning, and alcohol-attributable deaths.**



What are 'deaths of despair'?

- Suicide, drug poisoning, and alcohol-attributable deaths are sometimes grouped together and labeled '**deaths of despair**'.
- The term is meant to signal the fact that these deaths often share a common underlying cause: **psychological distress**.
- They are rising in the context of important and (we think) related changes in broader **social and economic conditions**:
 - Growing income inequality
 - A shrinking social safety net
 - Deteriorating labour market conditions

Why focus on employment?

- 'Deaths of despair' are rising most rapidly among working-age adults.
- Research shows that **employment is highly protective**, because it provides a source of income, status, meaning, and connection.
- But **not all jobs are created equal** — some forms of employment are insecure and unrewarding, leaving people vulnerable to 'despair'.
- We know little about how **quality of employment** influences the risk of suicide, drug poisoning, and alcohol-attributable death.

What is employment quality?

- Employment quality refers to the terms and conditions of a job that shape a person's experience of employment.
- Employment is considered high quality when **it enables people to meet their needs and pursue their goals** — both of which are essential to well-being.
- As a concept, employment quality can help us distinguish between 'good' and 'bad' jobs.



Objectives

In this study, we examined the impact of employment quality on risk of suicide, drug poisoning, and alcohol-attributable mortality.

We had two main objectives:

1. Describe the quality of employment arrangements in Canada.
2. Assess differences in the risk of suicide, drug poisoning, and alcohol-attributable mortality according to employment quality.

Methods

Data Sources

Canadian Census Health and Environment Cohort (CanCHEC)

A nationally representative cohort of 6 million Canadians who were selected to complete the mandatory long-form Census in 2006.

Canadian Vital Statistics Death Database (CVSD)

A database of all deaths recorded in Canada each year.

We linked **census records** from the 2006 CanCHEC to **death records** in the CVSD, with thirteen years of follow up (2006-2019).

Sample

The study sample included **2.8 million workers**.

Included

Adults who were 18-64 years old and active in the labour force (i.e., employed or seeking work).

Excluded

Not in the labour force (e.g., due to schooling)

No employment history (i.e., first-time jobseekers)

Temporary absent from work (e.g., due to health)

How did we assess employment quality?

We assessed three aspects of employment quality at baseline (2006).

Stability	Captures the number of weeks employed during the previous year.
Hours	Captures the usual number of hours worked.
Earnings	Captures total personal income from wages, salaries, or tips during the previous year.

We would have liked to look at other aspects of work (e.g., benefits, autonomy, meaning), but these are not measured in the Census. More on this later.

How did we assess cause of death?

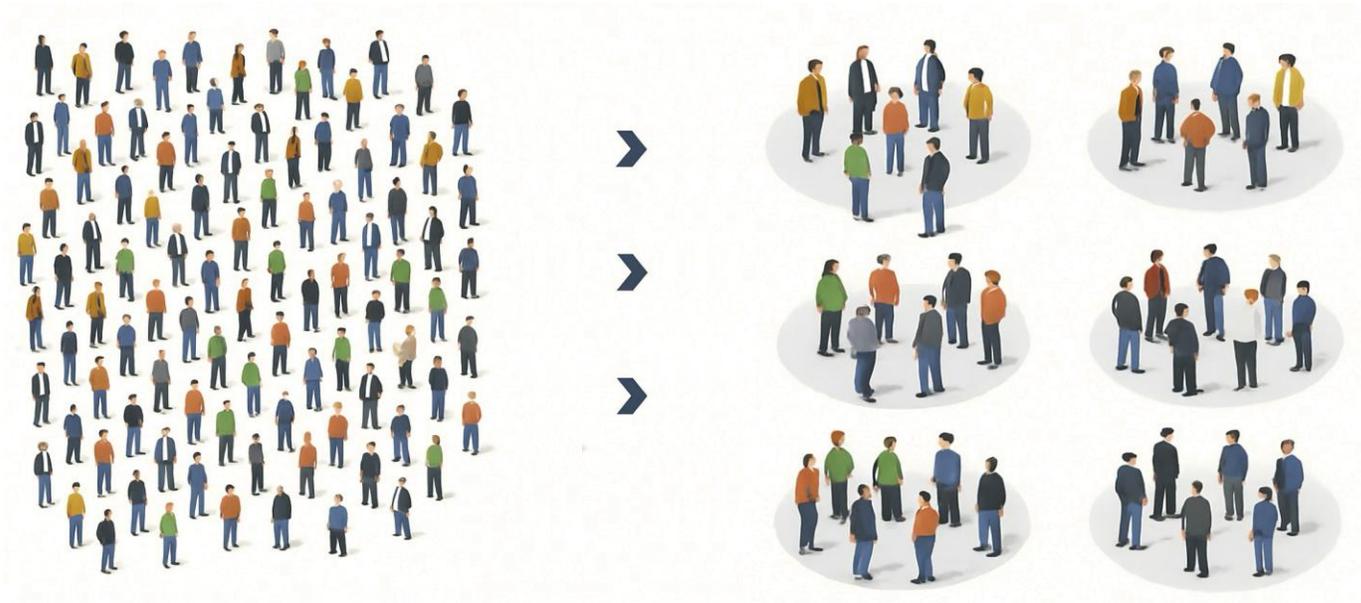
Underlying cause of death was determined using International Classification of Disease, 10th Revision (ICD-10) codes.

Suicide and drug poisoning deaths were identified using definitions provided by Statistics Canada.

Alcohol-attributable deaths were identified using a definition provided by the Canadian Institute for Health Information. These deaths are thought to be entirely attributable to alcohol.

Latent class analysis

We grouped workers according to the quality of their employment. These groups are known as latent classes. Each latent class represents a distinct ‘type’ of employment — some higher in quality, some lower in quality.



Regression analysis

We examined the association between 'type' of employment in 2006 and risk of suicide, drug poisoning, and alcohol-attributable death over thirteen years of follow up (2006-2019).

Regression models were stratified by sex and statistically adjusted to account for the role of age, race/ethnicity, immigrant status, marital status, household size, region of residence, rurality, and education.

Suicide, drug poisoning, and alcohol-attributable deaths were looked at separately.

Results

We identified five overarching types of employment that vary considerably in terms of quality.

Standard (44%)

Stable employment with full-time hours and high earnings.

Portfolio (15%)

Stable employment with long hours and very high earnings.

Marginal (13%)

Stable employment with limited hours and low earnings.

Intermittent (16%)

Unstable employment with long hours and average earnings.

Precarious (12%)

Unstable employment with limited hours and very low earnings

**We used standard employment as a point of reference —
“How does each group compare to standard employment?”**

Standard (44%)

Stable employment with full-time hours and high earnings.

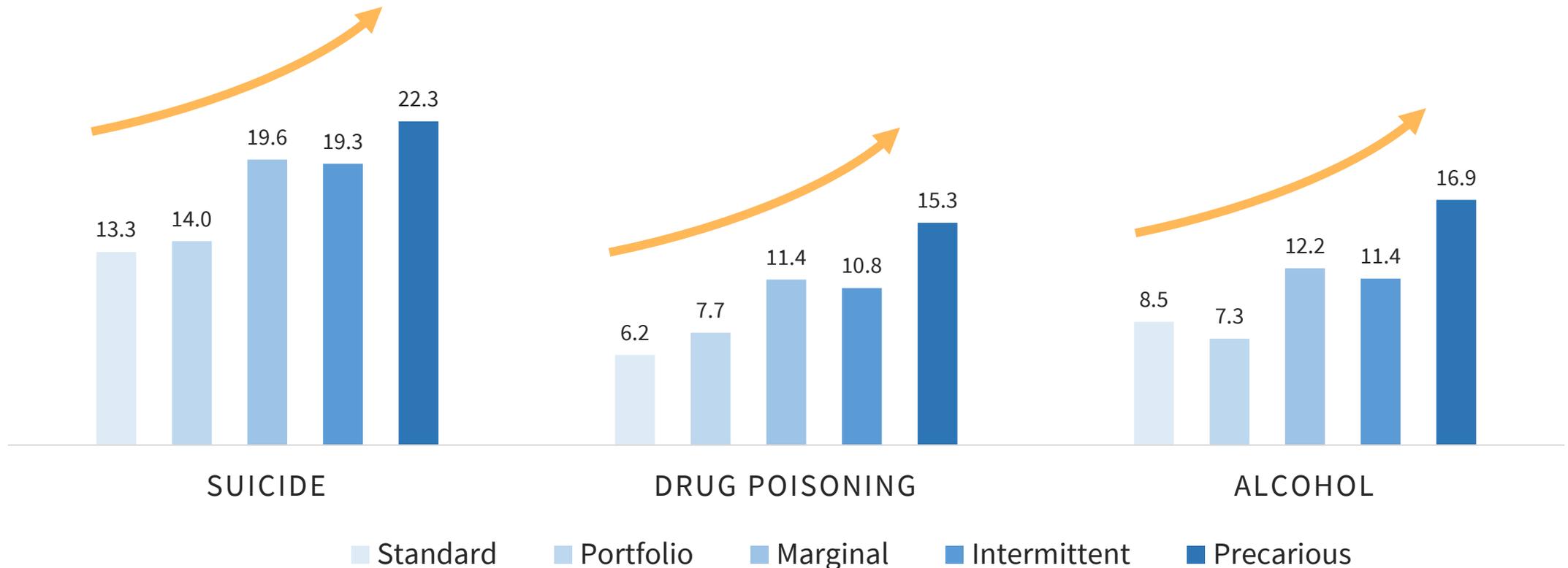


Workers in lower quality employment were more likely to be women, younger, and identify with a non-white race or ethnicity.

	Standard	Portfolio	Marginal	Intermittent	Precarious
Women	46%	25%	65%	48%	55%
18 to 34 years old	26%	24%	41%	43%	60%
Non-white race or ethnicity	15%	16%	19%	22%	25%

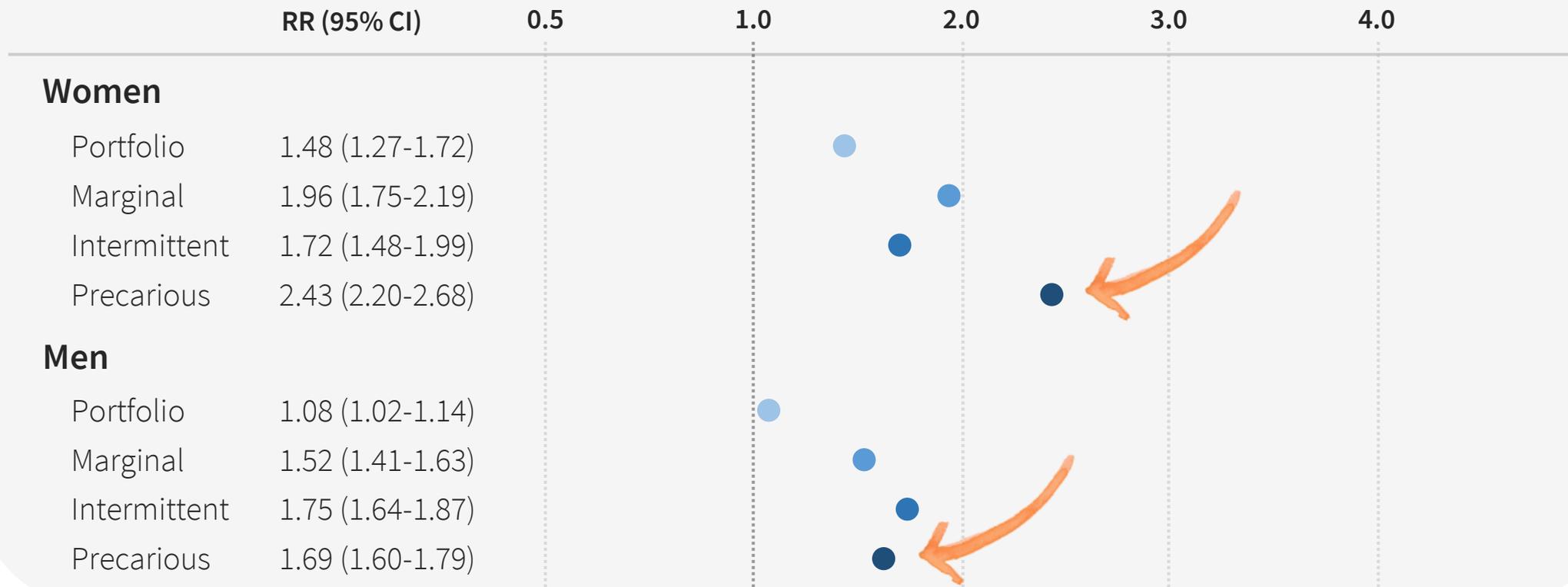
Workers in lower quality employment had higher rates of suicide, drug poisoning, and alcohol-attributable mortality.

Age-standardized mortality rates (per 10,000)



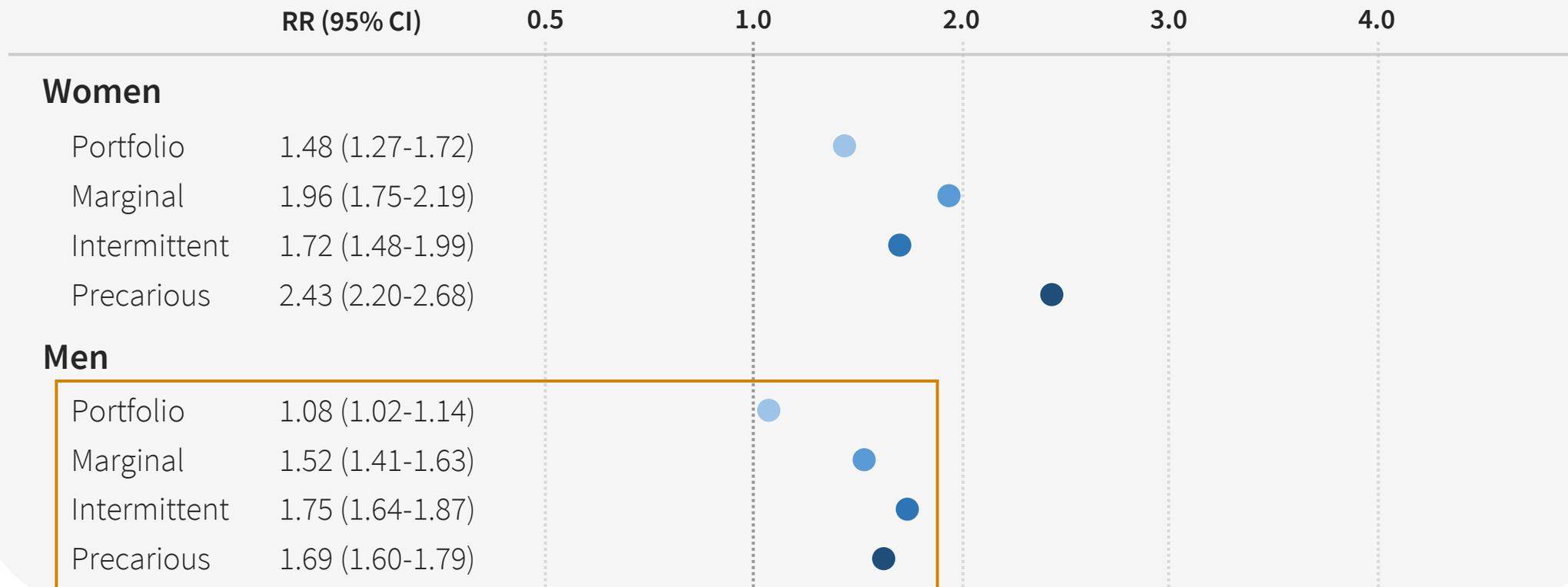
Workers in precarious employment were about twice as likely to die by suicide, relative to workers in standard employment.

Relative Rate (RR) of Suicide Mortality (Reference: Standard Employment)



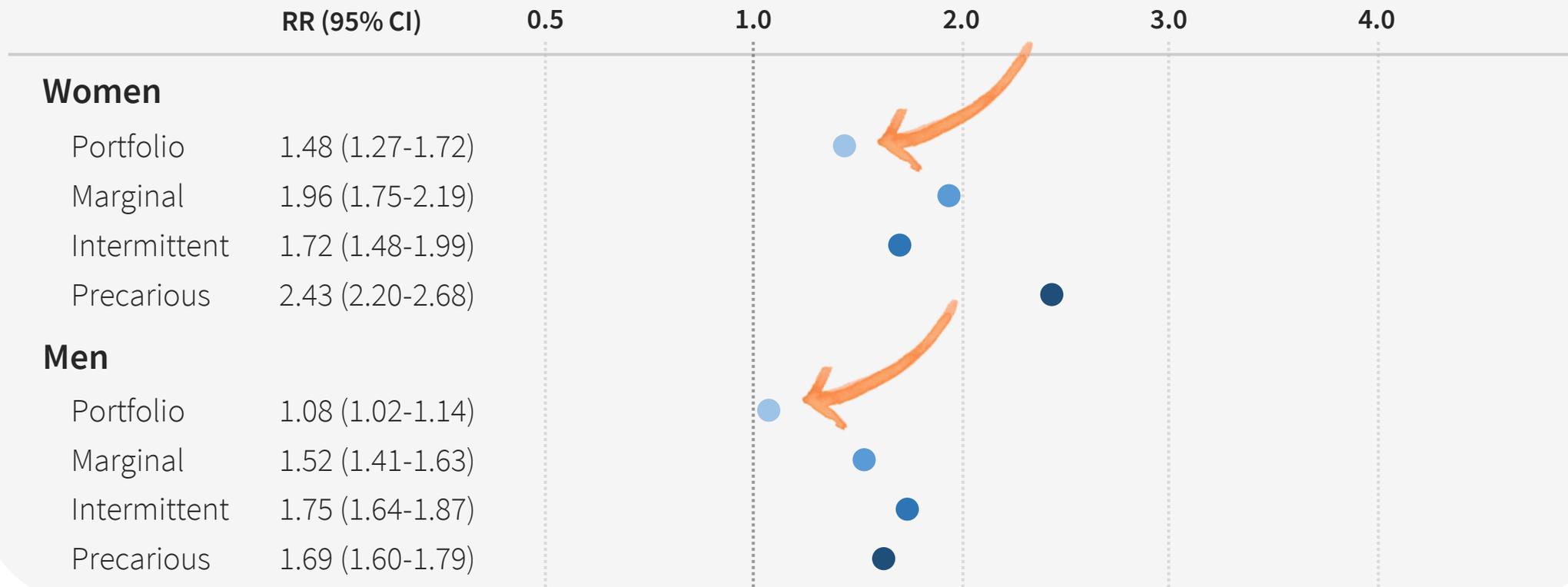
Differences were not as stark among men — although men experience higher rates of suicide overall.

Relative Rate (RR) of Suicide Mortality (Reference: Standard Employment)



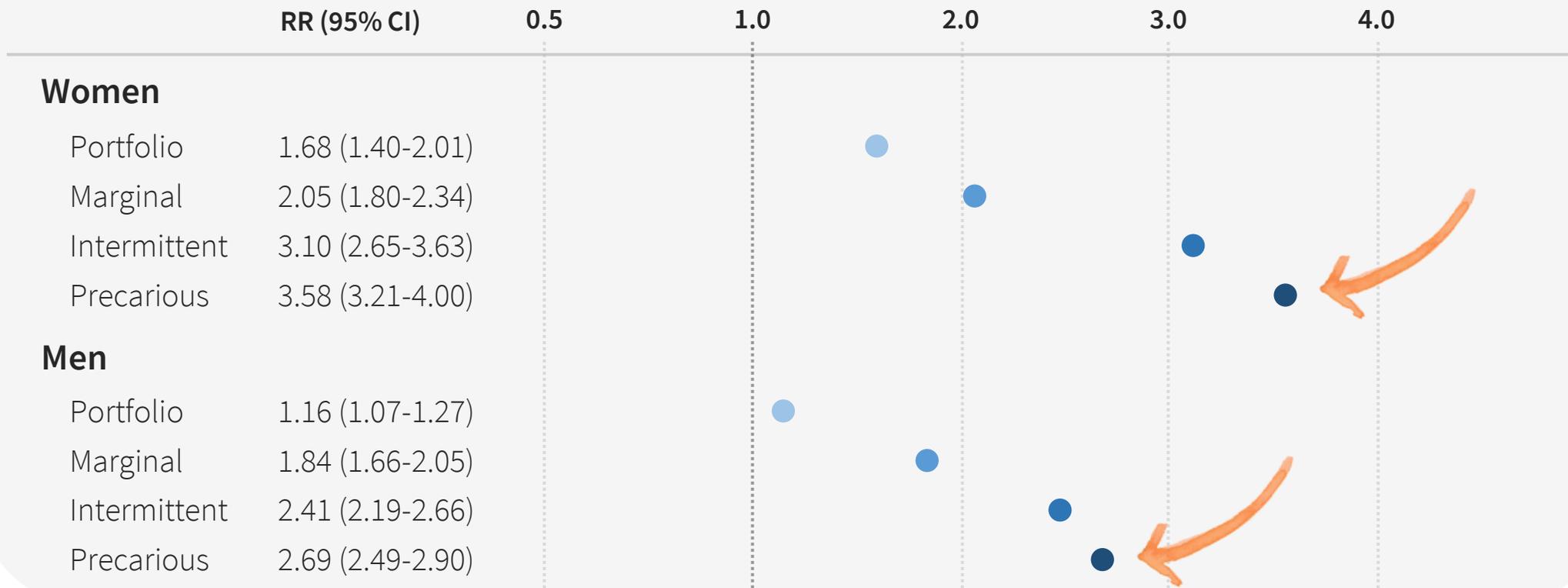
For example, portfolio employment was associated with an increased risk of suicide among women, but not men.

Relative Rate (RR) of Suicide Mortality (Reference: Standard Employment)



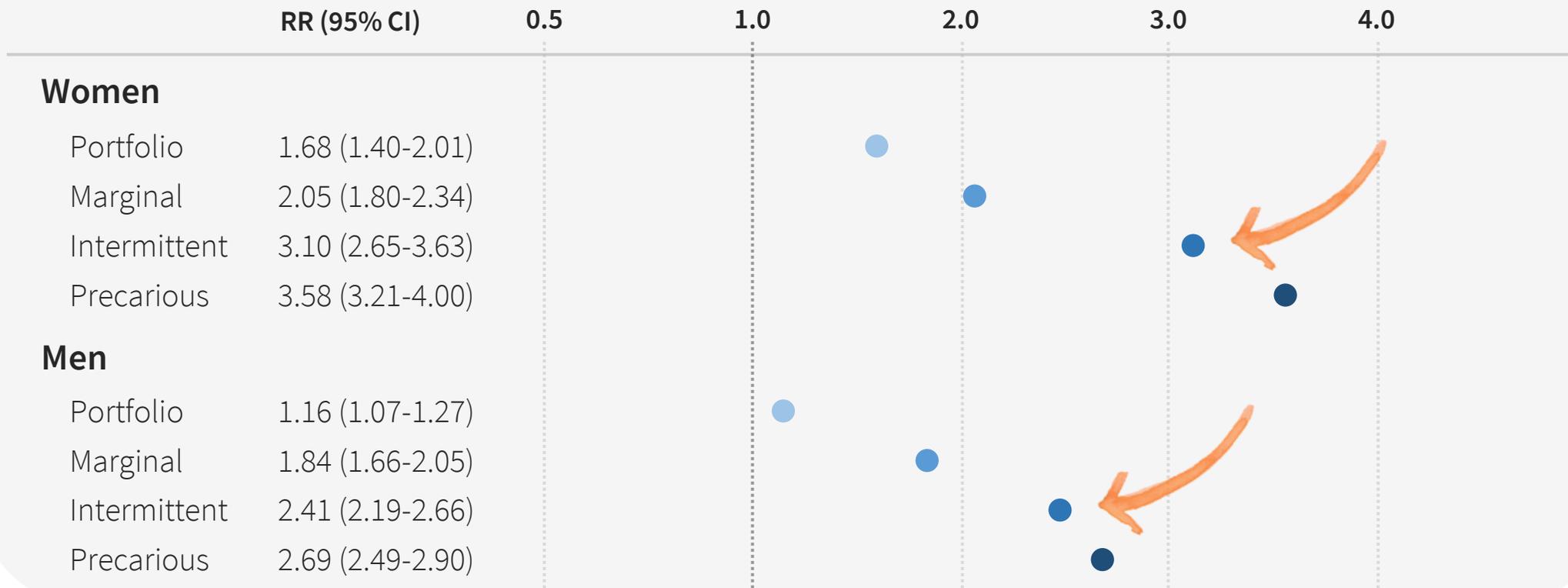
Workers in precarious employment were about three times as likely to experience a fatal drug poisoning.

Relative Rate (RR) of Drug Poisoning Mortality (Reference: Standard Employment)



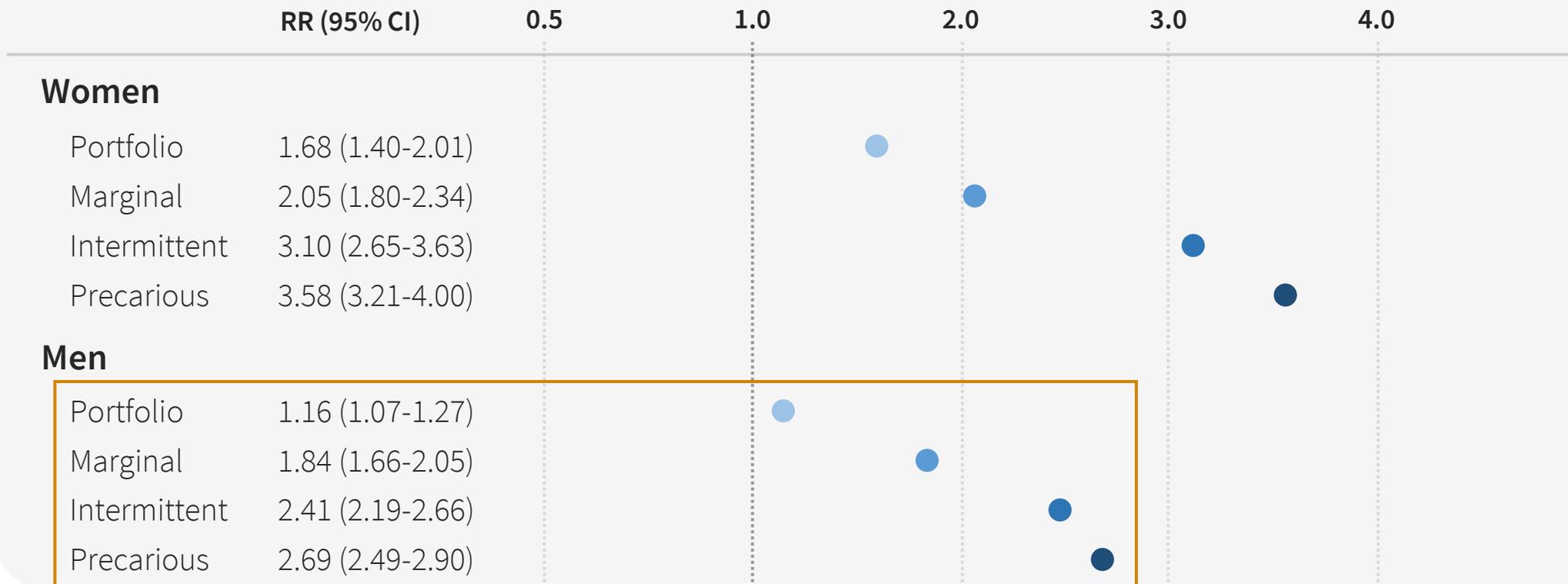
Workers in intermittent employment were nearly three times as likely to experience a fatal drug poisoning.

Relative Rate (RR) of Drug Poisoning Mortality (Reference: Standard Employment)



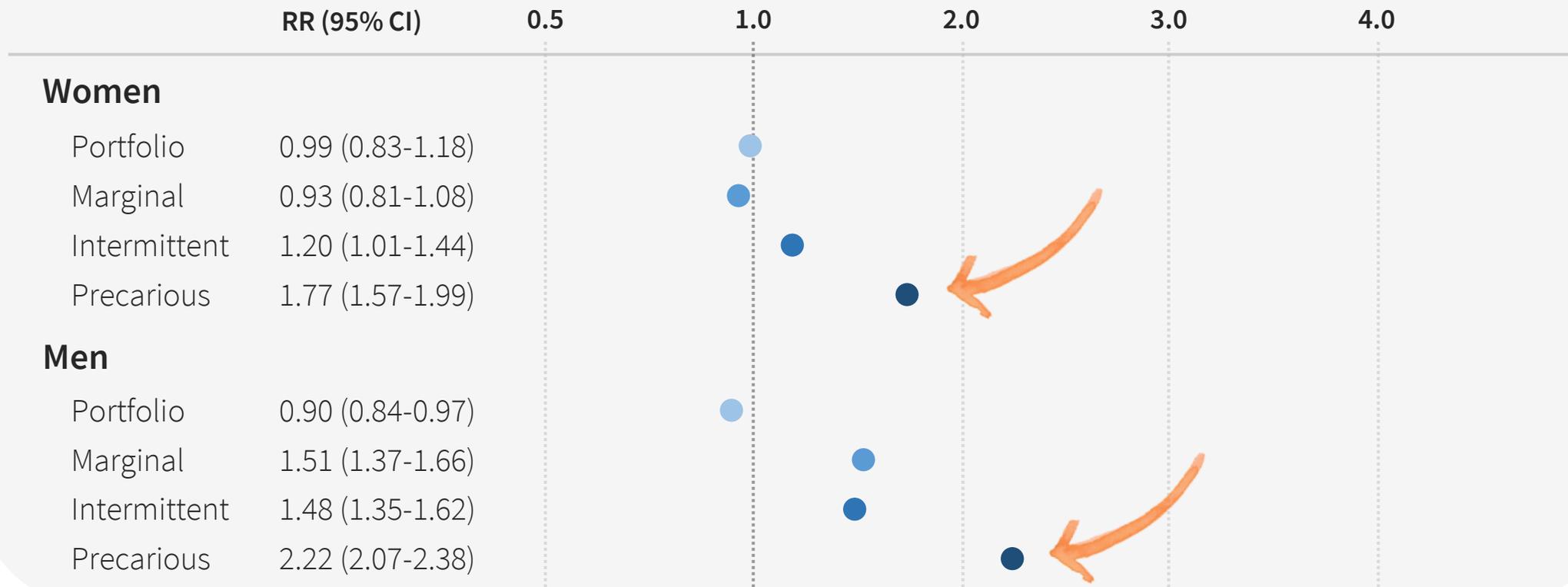
While large differences were observed among men and women alike, they were again less pronounced among men.

Relative Rate (RR) of Drug Poisoning Mortality (Reference: Standard Employment)



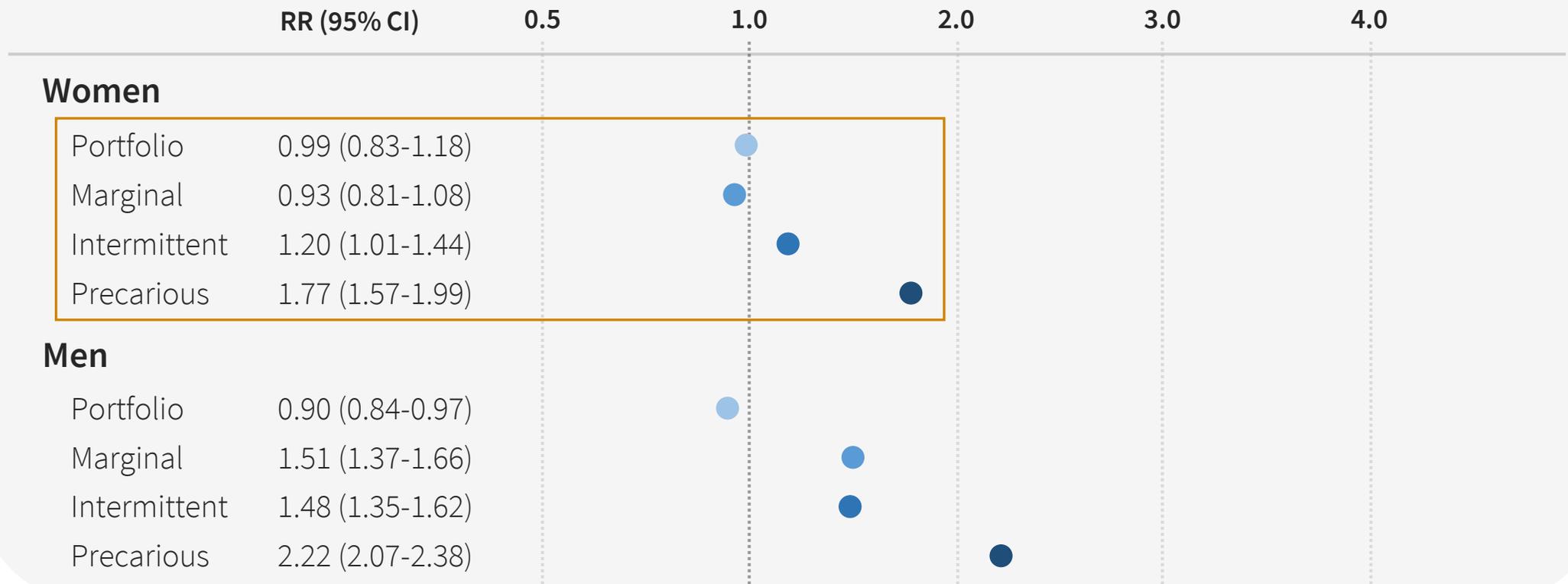
Workers in precarious employment were about twice as likely to experience an alcohol-attributable death.

Relative Rate (RR) of Alcohol-Attributable Mortality (Reference: Standard Employment)



This time, differences were not as stark among women — most associations were weak or non-existent.

Relative Rate (RR) of Alcohol-Attributable Mortality (Reference: Standard Employment)



Discussion

Summary

- We identified five types of employment, which we labeled — roughly in order of decreasing quality — Standard, Portfolio, Marginal, Intermittent, and Precarious employment, respectively.
- We observed a mortality gradient across these different employment arrangements, with lower quality employment (and precarious employment in particular) predicting a higher risk of suicide, drug poisoning, and alcohol-attributable death.
- Relative to their counterparts in standard employment, workers in precarious employment were two to three times more likely to experience a ‘death of despair’.
- Associations varied by sex — often stronger among women.

Strengths & Limitations

Strengths

- Large and nationally representative cohort of 2.8 million workers
- Long follow up — necessary when looking at specific causes of death
- Move beyond employment *status* to focus on employment *quality*

Limitations

- Static portrait of employment that is nearly two decades old
- Missing key dimensions of work (e.g., benefits, autonomy, meaning)
- Cannot rule out ‘reverse causation’ due to prior health problems

Key messages

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- Workers in **precarious employment** experience particularly high rates of suicide, drug poisoning, and alcohol-attributable mortality.
- Employment quality may be a **promising ‘upstream’ intervention target** for the prevention of suicide, drug poisoning, and alcohol-attributable deaths.
- Policy strategies should focus not only on creating more jobs, but also on **ensuring that the jobs we create are of good quality**.

Thank you

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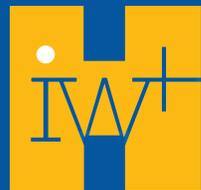
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