

Measures of variance of age of death aren't age discriminatory.

Age discrimination by a measure of variance?

A recent commentary in AJPH argued that measures like Years of Life Lost (YLL) are age discriminatory. First, because such measures give more weight to deaths at younger ages. Second, this weighting is justified because younger lives have more value to society. I agree with the second criticism, we should value all human life. I strongly disagree with the first.

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Why do I disagree?

YLL is similar to measures of variance in demography, which I have highlighted as measures of inequality. Such measures summarise the distribution of deaths by age. One key finding is that there is a close relationship between the mean age of death and the variance. So if you object to measures of variance that give more weight to young deaths then you object to measures of the mean, like life expectancy, that also reflect years of life lost.

Moreover, even more simple measures like the death rate when used to make comparisons between groups could be regarded as age discriminatory. This is because often the difference is not only due to higher rates but also due to a different distribution of death. So, essentially the logic of the argument of the commentary leads to all measures of inequality being age discriminatory.

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These measures highlight inequality.

Measures of variance in the age of death have highlighted countries like the USA that do poorly in both life expectancy and inequality. This is because of high levels of working age deaths, especially amongst men. This is probably related to high levels of unemployment and deprivation. In fact the USA is an outlier in that it manages to have a slightly higher life expectancy than its level of inequality would suggest. It performs well for older ages but extremely poorly for its young. The argument that measures that highlight early life mortality are somehow age discriminatory has been made elsewhere as well. However, I think the logic is flawed.

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Funding and disclaimer

The MRC/CSO Social and Public Health Sciences Unit is funded by the Medical Research Council and the Scottish Government Chief Scientist Office. The views expressed are not those of the Medical Research Council or the Scottish Government.

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