Loneliness at local and neighbourhood level

Summary July 2015

What is loneliness?

Loneliness can be understood as an individual's personal, subjective sense of lacking desired affection, closeness, and social interaction with others. Loneliness is not the same as social isolation. Although it has a social aspect, loneliness is also defined by an individual's subjective emotional state.

How can it be measured?

Age UK's research is the first and, so far, only evidence linking loneliness with local risk. All other attempts to measure and chart loneliness are measures of social isolation, no matter what they claim to be. Superimposing factors identified in the literature as being associated with loneliness without knowing their weightings (see below) is also not a valid measure of loneliness risk at any level, as simply adding the factors together and not weighting them in fact means that they are all weighted equally, which our research shows is far from accurate.

This is not only because some of the factors associated with loneliness do not come out as significant in our analysis, but because some effects are more than 10 times stronger in their association than others and, if they are not weighted properly, the overall picture – the basis of all the subsequent statistical data – is totally wrong.

For this work, we are looking for risk of being lonely in later life (aged 65 or over), both for the individual and between areas in order to identify what the main risk factors associated with loneliness are, and where to look for the highest risk.

What is the best way of finding out if someone is lonely?

There have been several attempts to "objectivise" loneliness and define it in terms of terms of isolation and loss. Such measures are used by the English Longitudinal Study of Ageing (ELSA) but it also asks "How often do you feel lonely", giving choices of frequency. Results are then given for those who say "often" (in Age UK survey, in line with Victor's survey questions "often" or "always").

What is ELSA and why are we using it?

ELSA is properly validated and administered by UCL, Manchester University, IFS and Nat Cen. Wave 5 (2010-12 used here) had a sample size of 10,274 people aged 50+ in England.

It is accepted by academics and politicians

It asks the right question about loneliness

Disadvantages: sample size still not big enough to cover all neighbourhoods (blanks), attrition, representativeness (although adjusted to allow for these)

What can the ELSA analysis tell us at national level (England)?

By regression analysis of the factors associated with the loneliness answers, we have identified all the significant risk factors (i.e. left out all those which show an association but not sufficiently robust to exclude chance), identified their individual effect on the overall score (i.e. weighted them by their relative importance) and worked out the risk odds for each factor.

What is the recipe for loneliness in later life?

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Variables	Estimate	Error	z value	Prob
Constant	-2.6200	0.6119	-4.2820	0.0000
Self-reported Health - Poor	2.0344	0.3894	5.2250	0.0000
Self-reported Health - Fair	1.5819	0.3689	4.2880	0.0000
Household Size	-1.0402	0.2402	-4.3310	0.0000
Widowed	1.0317	0.2582	3.9960	0.0001
Self-reported Health - Good	0.9842	0.3640	2.7040	0.0069
Eye conditions 3+	0.8551	0.5056	1.6910	0.0908
Pets	0.4284	0.1362	3.1450	0.0017
Difficulty with 2+ ADL	0.3759	0.1779	2.1120	0.0347
Age group 75-79	-0.3542	0.1945	-1.8210	0.0686
Difficulty with 1 ADL	0.3169	0.1692	1.8720	0.0612

Loneliness: significant factors rank order, England, ELSA Wave 5 2010-2012

What can the Census (2011) tell us?

Working with the Office for National Statistics using close proxy measures from the Census, we have identified almost all the risks at lower level geographies.

The formula derived from the national (ELSA) analysis can then be applied to the following areas: local authority, middle super output area (large neighbourhood), lower super output area (roughly, ward size) and output area (street/ postcode level).

As the information is from a Census rather than a survey, the usual problems of sample size, disclosure/ anonymity and minority-group representativeness do not apply or are easily dealt with. We are currently in a position to assess relative risk of loneliness for areas down to output areas, for trial "sense-checking" by Age UK partners around England.

The risk does not depend on how many people aged 65+ live in an area (although, in a very small number of neighbourhoods, there are too few to count) and the range of risk is greater in the smaller areas. Comparing those areas most at risk with those least at risk (top to bottom of the loneliness scale):

- The highest score for a Local Authority is 2.3 times as big as that of the lowest.
- For Middle Super Output Areas, the highest risk is 4.5 times the lowest.
- For Lower Level Output Areas, the top score is 25 times the lowest score.
- For Output Areas, the highest risk area in England is 82 times greater than the lowest risk area.

So, not only did no-one have the recipe for loneliness, but they did not have the information for targeting loneliness at the right area level.

Where next?

Validation and trials around England to see if it makes sense to partners and people locally.

Sense check comparison of "big" and "small data".

Work in conjunction with other agencies to pinpoint "hotspots" of loneliness risk and target resources accordingly.

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