Life in lockdown: A telephone survey to investigate the impact of COVID-19 lockdown measures on the lives of older people (≥ 75 years).

Lesley Brown¹
Rahena Mossabir¹
Nicola Harrison¹
Caroline Brundle¹
Jane Smith¹
Andrew Clegg²

¹Academic Unit of Elderly Care & Rehabilitation, Bradford Institute for Health Research, Bradford Teaching Hospitals NHS Foundation Trust, Bradford, BD9 6RJ, UK
²Academic Unit of Elderly Care & Rehabilitation, University of Leeds, Bradford Teaching Hospitals NHS Foundation Trust, Bradford, BD9 6RJ, UK

Full address and current email of the Corresponding Author
Lesley.brown@bthft.nhs.uk

© The Author(s) 2020. Published by Oxford University Press on behalf of the British Geriatrics Society. All rights reserved. For permissions, please email: journals.permissions@oup.com.
Abstract: Background: In response to the COVID-19 coronavirus pandemic, the UK government introduced social distancing measures and identified specific populations at high risk from the virus. People $\geq 70$ were deemed ‘Clinically Vulnerable.’ Distancing measures were introduced to reduce the risk of contracting COVID-19. However, these may have a negative impact on older people who are vulnerable to social isolation and may have challenges accessing services and provisions.

Objectives: To investigate the impact of COVID-19 lockdown measures on the lives of older people.

Study design and setting: Cross-sectional telephone survey.

Participants: Community-dwelling older people, 76–97 years.

Outcomes: Health anxiety; General health (RAND Short-form 36 Survey); Physical activity; Depression (PHQ-8); Anxiety (GAD-2); Loneliness; Access to services; Challenges, concerns and positive experiences.

Data analysis: Counts (%), means (SDs). Thematic analysis was used to identify themes from open questions.

Results: $n=142$. 52% did not worry about their health; 76% rated their health as ‘good’, ‘very good’ or ‘excellent’. $<10\%$ met the criteria indicative of depression (PHQ-8), or anxiety (GAD-2). 42% were less active than before lockdown. 27% were lonely at least some of the time. Over half of participants identified positive aspects.

Conclusions: Most participants reported good health with low levels of health anxiety, anxiety and depression. Many were able to identify positive aspects to lockdown and may be better equipped to deal with lockdown than anticipated. Strategies may be required to ameliorate the negative impact of loneliness for a minority of older people, and help some resume previous activity levels and pursuits.

Keywords: COVID-19, Older people, Ageing, Survey.
Key points:

• Social distancing measures during COVID-19 may negatively impact the lives of older people.

• We investigated the impact of social distancing measures on the lives of older people living in Bradford.

• Most participants reported good health with low levels of health anxiety, anxiety and depression.

• Many were able to identify positive aspects to lockdown and may be better equipped to deal with lockdown than anticipated.

• Strategies may be required to ameliorate the negative impact of loneliness for a minority of older people.
Background
On 23rd March 2020, the UK government imposed a ‘lockdown’ banning non-essential travel and contact with people outside the home in response to the COVID-19 pandemic. People 70 years and over were classed as an at risk ‘Clinically Vulnerable’ group and advised to minimise contact with people outside of their household and to remain at home wherever possible.

These measures were introduced to reduce the risk of contracting and spreading COVID-19. However, implementation of these measures may have a potentially negative impact on older people already vulnerable to loneliness and social isolation and who may have challenges accessing services and essential provisions. Furthermore, identification as an ‘at risk’ group and frequent media portrayal as vulnerable can be patronising [1] and may impact on self-worth and heighten anxiety [2]. COVID-19 is proposed as a ‘Perfect Storm’ for older people’s mental health [2] with isolation measures potentially impacting on physical and mental function [3]. Self-isolation measures may disproportionally affect older people whose social contact is often outside of the home [4, 5].

To date, we have limited evidence on the impact of COVID-19 measures on the lives of older people in the UK.

Objectives
To investigate the immediate impact of social distancing measures on the lives of older people (≥ 75 years) living in Bradford during the COVID-19 pandemic.

Methodology
Participants were identified from the Community Ageing Research 75+ (CARE75+) longitudinal cohort study (ISRCTN16588124) [6]. Telephone survey administered between 14/05/2020 and 01/06/20.

Inclusion criteria
CARE75+ participants resident in Bradford (BD Postcode area) undergoing routine study assessments and consenting to be approached about other studies.

Exclusion criteria
Care home residents, dementia diagnosis, lacking capacity to consent.

Initial contact
Eligible participants were posted study information and informed that a researcher would telephone to discuss participation.

Telephone contact
Researchers provided details of the study, study confidentiality and data storage, and requested verbal consent to proceed.
Survey questions
Topics were identified by the Bradford Institute for Health Research COVID-19 Scientific Advisory Group (C-SAG) [7], with Patient and Public Involvement (PPI) consultation [8].

Included topics:
- Self-isolation/social distancing
- Health anxiety (selected item from Health Anxiety Inventory) [9]
- General health (selected item from RAND Short-Form 36 Survey) [10]
- Physical activity
- Depression (Personal Health Questionnaire Depression Scale, PHQ-8) [11]
- Anxiety (General Anxiety Disorder 2 scale, GAD-2) [12]
- Loneliness (selected question) [13]
- Access to and experience of health, pharmacy, social/council, voluntary services
- Open questions about challenges, concerns and any positive aspects to life during the pandemic.

All questions: https://www.bradfordresearch.nhs.uk/care75/care75-covid-19/.

Data analysis
Descriptive statistics, including frequencies (%), means (standard deviations), or non-parametric equivalents.

Thematic analysis identified themes from three open questions by: coding the data, generating labels for important aspects, constructing and reviewing themes using Braun and Clark’s (2006) six step framework [14].

Data input and storage
Data were collected and managed using Research Electronic Data Capture (REDCap) electronic data capture tools hosted at BTHFT [15, 16]. REDCap is a secure, web-based software platform for research data capture. Data was inputted directly into RedCap by researchers.

Safeguarding
We anticipated identifying people who might be struggling during the current COVID-19 situation (e.g. accessing shopping) and had helpline numbers to signpost to services if necessary.

Results
One hundred and eighty four people were eligible. 171 were contacted by telephone. Of those, 142 participants from urban and rural locations across Bradford completed the survey. See Study Flow Diagram (Supplementary data Appendix 1). Participant characteristics are reported in Table 1.
Table 1. Participant characteristics (n = 142) at the time of COVID-19 Survey (14/05/2020 – 01/06/2020) Figures are numbers (% of non-missing values) unless otherwise stated.

| Characteristics                                                                 | n (%)      |
|---------------------------------------------------------------------------------|------------|
| **Age Mean (SD) Range**                                                         | 82.4 (4.4) |
| **Female**                                                                      | 71 (50)    |
| **Ethnicity**                                                                   |            |
| White                                                                           | 129 (90.8) |
| South Asian                                                                      | 11 (7.7)   |
| White/Black Caribbean                                                           | 1 (0.7)    |
| **Numbers of comorbidities (General Practice Electronic Patient Record ) Median (IQR) Range** | 3 (4) 0 - 12 |
| **Relationship status**                                                         |            |
| Married/living with spouse                                                      | 69 (48.6)  |
| Widowed                                                                         | 56 (39.4)  |
| Divorced                                                                        | 9 (6.3)    |
| Single                                                                          | 8 (5.6)    |
| **Currently Living alone**                                                      | 70 (49.0)  |
| **Decile rank:**                                                                |            |
| 1<sup>st</sup> (most deprived)                                                 | 19         |
| 2<sup>nd</sup>                                                                  | 18         |
| 3<sup>rd</sup>                                                                  | 18         |
| 4<sup>th</sup>                                                                  | 10         |
| 5<sup>th</sup>                                                                  | 8          |
| 6<sup>th</sup>                                                                  | 8          |
| 7<sup>th</sup>                                                                  | 24         |
| 8<sup>th</sup>                                                                  | 5          |
| 9<sup>th</sup>                                                                  | 27         |
| 10<sup>th</sup> (least deprived)                                               | 5          |
| **Access to the internet (including via telephone)**                            | 93 (65.5)  |
| **Access to outdoor space you can use**                                        | 134 (94.4) |
| **Type of outdoor space (if applicable)**                                      |            |
| Private                                                                         | 123 (91.8) |
| Shared                                                                          | 11 (8.2)   |
| **Someone within the household able to do food shopping**                       | 57 (59.9)  |
| **Someone external to household to do food shopping**                           | 84 (98.8)  |
| **Currently self-isolating**                                                    | 89 (62.7)  |
| **Reasons for self-isolating (multiple reasons allowed)**                      |            |
| Protect a vulnerable person living in the household/protect spouse              | 14 (9.6)   |
| Family member advised it                                                        | 18 (12.7)  |
| Government/General Practice advice                                              | 74 (52.1)  |
| Anxiety about catching the virus/fearful of dying alone/spouse frightened of catching the virus | 10 (7.0)   |
| Having a chronic health condition/ inability to mobilise                        | 4 (2.4)    |
| Other reasons                                                                   | 9 (6.3)    |

"Have the terms ‘self-isolation’ and ‘social-distancing’ been clearly explained to you in the last few weeks? This does not include my explanation to you now?"

Yes                                                      | 120 (84.0)  |
Do you feel you have had enough information about what you should and should not be doing during the COVID-19 coronavirus situation? For example, if you should go out and if it is acceptable to go?

| Response | Frequency | Percentage |
|----------|-----------|------------|
| Yes      | 120       | 84.5       |
| No       | 11        | 7.7        |
| Unsure   | 11        | 7.7        |

*a* identified from most recent routine CARE75+ assessment; *b* n = 134; *c* n = 85

**Self-isolation**
Sixty two percent of participants reported self-isolating (not leaving the house even for shopping) at the time of the survey (reasons for self-isolating reported in table 1).

**Health anxiety, general health and physical activity** *(Supplementary data – Appendix 2)*
Most participants (52.1%) did not worry about their health. Participants rated their health as good (35.2%), very good (28.9%) or excellent (12.0%).

Most participants (59.9%) were carrying out physical activities every day. 68.9% undertook physical activity outdoors every day/most days. Many (42.3%) were less active than before lockdown. Some (16.9%) reported exercising more.

**Depression**
Eleven participants (7.7%) met the criteria indicative of major depression (score 10-19), and two (1.4%) for severe major depression (score ≥20). Invalid score (n = 1).

**Anxiety**
Ten (7.0%) participants met the criteria indicative of generalized anxiety disorder (≥3).

**Loneliness**
Less than 5% of participants were lonely most or all of the time. See Appendix 2. *(Supplementary data - Appendix 2).*

**Access to services**
Participants were asked if they had *needed* to access health, social/council, pharmacy or voluntary services since the COVID-19 lockdown, if they had been *able to* access the service, and if they received the required support *(Table 2).*
Table 2. Access to services in Bradford by older people during the COVID-19 pandemic. Figures are number (% of non-missing values) unless otherwise stated. n = 142

| Service Type                          | Access to appointment or service? | Appointment format | Did you receive the support you needed? |
|---------------------------------------|----------------------------------|--------------------|----------------------------------------|
|                                       | n (%)                            | n (%)              | n (%)                                  |                                      |
|                                        |                                  |�                     | b                                      |                                      |
| Doctor/general practice nurse          |                                 |                     |                                        |                                      |
| Yes 36 (25.4)                          | Yes 31 (86.1)                    | In person 9 (29.0)  | Definitely 27 (87.1)                    |
| No 106 (74.6)                          | No 3 (8.3)                       | Telephone 21 (67.7) | Mostly 1 (3.2)                         |
| Haven’t tried 2 (5.6)                  | Missing 1 (3.2)                  |                     | No 3 (9.7)                             |
| Emergency services                     |                                 |                     |                                        |                                      |
| Yes 6 (4.2)                            | Yes 6 (100.0)                    | NA                  | Definitely 5 (83.3)                     |
| No 136 (95.8)                          |                                  |                     | Mostly 1 (16.7)                        |
| NHS 111 (telephone/on-line)            |                                 |                     |                                        |                                      |
| Yes 4 (2.8)                            | Yes 4 (100.0)                    | Not asked           | Definitely 4 (100.0)                    |
| No 136 (95.8)                          |                                  |                     |                                        |                                      |
| Missing 2 (1.4)                        |                                  |                     |                                        |                                      |
| Specialist consultant, specialist clinic or outpatient appointment | | | | |
| Yes 15 (10.6)                          | Yes 13 (86.7)                    | In person 7 (53.8)  | Definitely 13 (100.0)                   |
| No 126 (88.7)                          | No 2 (13.3)                      | Telephone 7 (46.2)  |                                        |
| Missing 1 (0.7)                        |                                  |                     |                                        |                                      |
| Mental health services                 |                                 |                     |                                        |                                      |
| Yes 1 (0.7)                            | Yes 1 (100.0)                    | Telephone 1 (100.0) | No 1 (100.0)                           |
| No 140 (98.6)                          |                                  |                     |                                        |                                      |
| Missing 1 (0.7)                        |                                  |                     |                                        |                                      |
| Pharmacy services                      |                                 |                     |                                        |                                      |
| Yes 119 (83.8)                         | Yes 112 (94.1)                   | In person 56 (50.0) | Definitely 110 (98.2)                   |
| No 21 (14.8)                           | No 2 (1.7)                       | Telephone 33 (29.5) | Mostly 1 (0.9)                         |
| Missing 2 (1.4)                        | Haven’t tried 2 (1.7)            | On-line 20 (17.9)   | No 1 (0.9)                             |
|                                          | Missing 3 (2.5)                  | Missing 3 (2.7)     |                                        |                                      |
| Social Services or council services    |                                 |                     |                                        |                                      |
| Yes 7 (4.9)                            | Yes 7 (100)                      | In person 2 (28.6)  | Definitely 7 (100.0)                    |
| No 135 (95.1)                          |                                  | Telephone 3 (42.4)  |                                        |
|                                          |                                  | On-line 2 (28.6)    |                                        |                                      |
| Charity or voluntary service           |                                 |                     |                                        |                                      |
| Yes 4 (2.8)                            | Yes 4 (100)                      | In person 3 (75.0)  | Definitely 3 (75.0)                     |
| No 136 (95.8)                          |                                  | Telephone 1 (25.0)  | No 1 (25.0)                            |
| Missing 2 (1.4)                        |                                  |                     |                                        |                                      |

Note: If participants needed to access a service on multiple occasions, they were asked to consider their most recent experience

a % calculated from those that needed to access service

b % calculated from those that said yes to accessing a service

Worries, concerns and positive experiences

Participants reported their challenges, concerns and positive life aspects. See supplementary data - Appendix 3.
Challenges reported concerned: absence of social relationships; managing activities of daily living; lifestyle and wellbeing priorities; and managing health and wellbeing.

Concerns reported: perceived risks/consequences of contracting the virus; ‘avoiding people’ and ‘practicing social distancing’; the permanence of the virus without a vaccine; and their sense of safety in public places; and the impact of lockdown on the personal/family’s livelihood and wider economy.

Positive aspects reported: increased sense of community and feeling socially more connected with neighbours; a break from routine; lockdown had made life ‘simpler’, ‘slower’ and ‘easier’ and removed the pressure of ‘having to go out’; gardening and more time for household tasks; and starting or resuming hobbies.

**Discussion**

Considering the challenges faced during the COVID-19 pandemic, this ‘snap-shot’ of older people in Bradford, with good socio-demographic representation, suggests a broadly positive picture. Most older people reported low levels of health anxiety, good health, having low levels of depression and anxiety, and good access to services.

Most people did not report worrying about their health. This is reassuring considering the over 70s are considered at increased risk from COVID-19 and regularly portrayed in the media as ‘vulnerable’[1]. Nevertheless, health worries were expressed when asked specifically about concerns; some were very aware of their increased vulnerability and spoke of their fear of death from the virus.

The majority of people undertook some physical activity most or every day. Most exercised outside every day or most days and were fortunate to have access to outdoor space; the garden was cited as one of the more enjoyable aspects of lockdown, providing a space for gardening, relaxing, chatting to neighbours and exercise. However, approximately twenty percent reported not doing any physical activity outside and forty two percent were less physically activity than before restrictions were imposed.

Mood outcomes were generally positive. Few participants met the criteria indicative of depression or for anxiety. Our findings indicate that many older people are mentally well-equipped to deal with lockdown scenarios, although this should not negate the impact of social isolation identified in some participants. Possibly, life course experiences, including growing up during the Second World War years, and exposure to previous pandemics (e.g. 1957 and 1968 influenza pandemics) may have contributed to this mental resilience.

Approximately one quarter of the sample reported loneliness some of the time, most of the time, or almost all of the time. When reporting their challenges, many participants reported how the restrictions had impacted on their relationships and how a lack of contact made them feel isolated and lonely.

Service needs were mostly for general practice or pharmacy. Most people that needed to access a service were able to do so and subsequently received the required support. For those
without household access to food-shopping, the majority had external assistance, mostly from family members.

People reported numerous challenges. Face-to-face contact was missed. Some reported providing support to spouses without family assistance. Worries and concerns were expressed about the virus, in relation to themselves, their family and their family’s livelihood, for the national and global economy, and whether a vaccine would be available. However, over half of all participants could identify positive aspects of their experience including having more time, a break from routine and increased engagement with their neighbours.

**Strengths of the survey**
The sample was recruited from a cohort of community-dwelling older people with broad inclusion criteria, encompassing the least and most deprived areas of Bradford. Seventy seven percent of those eligible consented to participate.

**Limitations of the survey**
The survey was conducted by telephone, therefore precluded those with severe hearing impairment, who may have experienced different challenges. Additionally, our findings are not generalizable to older people living with dementia. The sample size precluded investigation of sub-populations or of any associations.

**Conclusions**
This cross-sectional survey suggests older people generally felt in good health with low levels of health anxiety, anxiety and depression during the national lockdown period. The majority of participants reported some positive aspects to their current situation, suggesting many older people may be well-equipped mentally to deal with lockdown. However, some experienced a negative impact on mental health, identifying an area for intervention if social distancing measures continue. Furthermore, many were exercising less than before the pandemic, and some spoke of the lasting impact on their sense of safety in public places. This may not be easily resolved if the threat of COVID-19 continues and as ‘normal’ life returns it cannot be assumed that older people will resume their previous activities.

Based on our findings, we recommend policy responses that include proactively identifying and addressing COVID-19 related mental health problems in later life for those experiencing negative impact, and public health strategies to promote safe physical activity should be considered to ameliorate the negative impact of ongoing and future COVID-19 restrictions.
Declaration of Sources of Funding: This report is independent research funded by the National Institute for Health Research Yorkshire & Humber Applied Research Collaboration. The views expressed in this publication are those of the authors and not necessarily those of the National Institute for Health Research or the Department of Health and Social Care.

Acknowledgements: We are grateful for the substantial contributions by lay members of the CARE75+ Frailty Oversight Group who helped identify topics and tested the questionnaire and the substantial contributions of the Bradford District Gold COVID-19 Scientific Advisory Group (C-SAG).

Declaration of Conflicts of interest: None

References

1. Fraser S, Lagacé M, Bongué B et al. Ageism and COVID-19: What Does Our Society's Response Say About Us? Age and Ageing 6th May 2020; https://doi.org/10.1093/ageing/afaa097.

2. Webb L. COVID-19 lockdown: A perfect storm for older people's mental health. Journal of Psychiatric and Mental Health Nursing 30th April 2020; https://doi.org/10.1111/jpm.12644.

3. Jordan RE, Adab P, Cheng KK. Covid-19: risk factors for severe disease and death. BMJ 2020; 368: m1198.

4. Richardson SJ, Carroll CB, Close J et al. Research with older people in a world with COVID-19: identification of current and future priorities, challenges and opportunities. Age and Ageing 2020; afaa149. https://doi.org/10.1093/ageing/afaa149.

5. Armitage R, Nellums LB. COVID-19 and the consequences of isolating the elderly. The Lancet Public Health 2020; 5: e256.

6. Heaven A, Brown L, Young J et al. Community Ageing Research 75+ study (CARE75+): an experimental ageing and frailty research cohort. BMJ Open 2019; 9: e026744.

7. COVID-19 Scientific Advisory Group (C-SAG). https://www.bradfordresearch.nhs.uk/c-sag/ (7th October 2020, date last accessed)

8. Heaven A, Brown L, Foster, M. Clegg A. Keeping it credible in cohort multiple Randomised Controlled Trials: the Community Ageing Research 75+ (CARE 75+) study model of patient and public involvement and engagement. Research Involvement and Engagement 2016; 2: 1-12.
9. Salkovskis PM, Rimes KA, Warwick H, Clark D. The Health Anxiety Inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis. Psychological Medicine 2002; 32: 843-853.

10. Hays RD, Sherbourne CD, Mazel RM. The Rand 36-Item Health Survey 1.0. Health Economics 1993; 2: 217-227.

11. Kroenke K, Strine TW, Spitzer RL et al. The PHQ-8 as a measure of current depression in the general population. Journal of Affective Disorders 2009; 114: 163-73.

12. Kroenke K, Spitzer RL, Williams JB, Monahan PO, B. Lowe B. Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. Annals of internal medicine 2007; 146: 317-325.

13. European Social Survey. Personal and Social well-being (ESS3 2006, ESS6 2012). https://www.europeansocialsurvey.org/data/themes.html?t=personal. (7th October 2020, date last accessed).

14. Braun, V. and V. Clarke, Using thematic analysis in psychology. Qualitative research in psychology, 2006. 3(2): p. 77-101.

15. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap) - A metadata-driven methodology and workflow process for providing translational research informatics support. Journal of biomedical informatics 2009; 42: 377-381.

16. Harris PA, Taylor R, Minor BL et al. The REDCap consortium: Building an international community of software platform partners. Journal of biomedical informatics 2019; 95: p.103208.