

Transcript: Lessons from Covid-19 Data



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Jools Kasmire: Hello everyone, I'm Dr Jools Kasmire from the UK Data Service computational social science training team based in Manchester. Today I'm going to talk to you about the UK Data Service and how it can contribute to an exploration of COVID-19.

I'll start by giving a quick summary of what the UKDS is, then I'm going to give you an overview of the data we hold and I'll finally show you how to get started finding and accessing our data.

The UKDS is a comprehensive resource funded by the Economic and Social Research Council, one of the many funded by UK Research and Innovation, as such we provide access to the largest collection of social, economic and population data in the UK. Data providers deposit their data with us and we then make this available to users. As well as providing access to all of that data, the UKDS provides support, training and guidance to help researchers find, access and use our data.

So who is it for? Well, we like to say it's for everyone, this includes, but is not limited to, academic researchers and students, government analysts, charities and foundations, business consultants, independent research centres, think tanks and many more.

And our data comes from many different sources; a lot of official agencies, mainly central government, but also international statistical time series, research institutions, individual academics can make their data available as part of their research grants, market research agencies, public records and historical sources and more.

And we hold all different types of data; quite a lot of survey data both cross sectional and longitudinal, we also hold aggregate data, international macro data, census data, qualitative data, mixed methods data and a few things that don't fit well into any of those categories.

So now I'll just quickly cover how you can find and access all of these datasets from the UKDS. If you don't know how to get started you can click on the find data tab on the top left which directs you to a few common options as well as some links to tutorials to learn more.

One of our most popular options is our catalogue search tool. The catalogue search tool allows you to search the datasets available from the UKDS, you can enter relevant search terms or search for particular datasets by name or study number, you can also use the filters down the left hand side to further refine your search.

But you may also want to browse with theme being the first browsing option presented to you, there are more themes if you scroll down but if you keep scrolling down past the themes you find you can browse by data type. You can keep scrolling even more to browse by teaching datasets and then at the very bottom there's a few other things that we've grouped together under general, you can browse these too.

You can also search for particular variables within datasets using our variable and Question Bank, for example if we type in Covid into the variable and Question Bank we can see which datasets contain variables on this topic. Just to note on the variable and Question Bank though, this doesn't contain all of the datasets that we hold at any given point in time so it's worth searching the catalogue for later versions of datasets to double check that you get everything you're looking for.

The options on the left hand side here are specific to the variable and Question Bank, you can see these options, you can expand them with the little plus signs, and this becomes clear if you choose instead to search the QualiBank,

now this is especially useful if you're interested in qualitative data as it allows you to search key terms within the different types of qualitative resources that we hold, again you'll notice that the little options here on the left hand side, those with the little plus signs, these are specific to the QualiBank.

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Finally we recommend you might want to search using the HASSET thesaurus. HASSET stands for Humanities and Social Science Electronic Thesaurus for those to whom it may not be obvious what HASSET stands for. This search tool contains key social science terms and related concepts, for example here I've searched 'immunisation' which is categorised under public health which is itself under health, and this sort of nesting structure's clear when you look at the HASSET tool via the hierarchy tab.

Alternatively, you can look at the thesaurus using the alphabetical tab which is pretty self-explanatory. This thesaurus is helpful to show you what other terms might be useful to search in the catalogue either because they fall higher or lower in the hierarchy than the term you originally looked for or because they're listed under the related concepts.

I'll just make a quick point here on our different data access levels. Starting at the most restricted types we have controlled data, which is also called secure access data, this data can only be accessed through a safe room, a secure lab within the UK or the SafePod Network.

Next we have safeguarded data, which is available through our end user licence, access to this kind of data requires registration, some of this data is also special licence data which has additional requirements. Then there's reshare data which is self-deposited by data creators or owners, access to and controls on this kind of data can vary.

Finally, the least restricted type is open data, this is data that can be accessed by absolutely anyone even without the need to register. Importantly, most of the data in our collections can be accessed free of charge, you can simply

register using your institutional login. If you don't have an institutional login you can apply to get a UK data archive username.

Thanks for listening and do let me know if you have any questions.

Alle Bloom: Hello everyone, my name is Alle Bloom from the UK Data Service user support and training team and today I'm going to talk you through how we responded to meet researchers' needs throughout the COVID-19 pandemic and the lessons we learnt about data discovery, providing training around this data and particularly the importance of collaborative networks in allowing us to do this.

So I'm going to start by covering who we are, what support we provided to users prior to the COVID-19 pandemic and what collaboration looked like then and then I'll cover our response to it and give a summary of the key lessons.

And just to highlight the scope of this presentation, I will focus on the user support and training team, that's not to say that other parts of the service didn't also adapt to user needs but this is my area of expertise so I'm going to focus on this.

So my colleague has already given a summary of the UK Data Service and who we are but just a little bit more information on the training team. So we provide guidance and resources to help users find, access, use, teach, train with and make the most of data and develop key skills in data use and we help users from a wide variety of backgrounds; the third sector, academics, students, public sector workers and members of government and beyond.

So I'm going to now give a brief overview of what support for researchers and what collaboration looked like for us prior to the pandemic.

So prior to COVID-19 and still, we have a range of training resources such as Webinars, workshops, interactive online resources, guides, conferences, online modules and many more examples and we also provide helpdesk support to users to help address any particular issues or data queries that they

might have. So if a user has a query with a variable or weighting in a dataset or something like that, they can email in to us and we'll help them through it and get in contact with the data providers if any more information is required, so you can see that already collaboration is a key part of how we work.

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And we have always worked alongside other organisations to deliver training and to facilitate access to resources, and collaboration has always been an important part of how we train both at a local and an international level

So for example, we are members of the Data Resources Training Network who have organised this event today, we also frequently collaborate with the National Centre for Research Methods, this is the major research methods training provider in the UK, they're funded by the government, and we've done things with them like create online guides and run events.

We're also part of CESSDA, the Consortium of European Social Science Data Archives, and have delivered a variety of training events in collaboration internationally with CESSDA for around ten years and we also worked on their data management expert guide, which is a really useful resource, if you get the time I'd recommend you take a look at it.

We also work on programmes to help develop the future of social sciences, so the Q-Step programme is a Nuffield Foundation funded programme placing students in environments to work with real data, so I am a graduate of that and we have hosted some interns of our own in the training team as well. We also collaborate frequently with government departments for conferences and we of course collaborate with the data providers who deposit their data with us, like I said earlier for example, getting in contact with any user queries that we get through our helpdesk.

So now I'm going to outline how we and the training team responded to the pandemic and give some examples of where collaborations were important to help us meet the needs of our users.

So two main areas I'm going to cover, the first of these is events and the second, resources. So when it comes to events we quickly moved all of our training events and conferences online, this meant that we could still deliver high quality training and support to users while maintaining that social distance.

We also collaborated with other organisations to create specific resources to support users during the pandemic and beyond.

So now onto a couple of examples of events, so we normally run user conferences throughout the year and prior to COVID-19 all of these were in person and then were moved online in the context of the pandemic restrictions. And the first conference that we did this with was our Health Studies User Conference, this is a conference that provides updates on the latest developments in the health surveys and research that has utilised them. We organise it in collaboration with the National Centre for Social Research, NatCen, and UCL, University College London.

It was a big risk for us to move this conference online but I'm pleased to say it was a huge success, we had over double the number of attendees had it been in person and we had a really wide reach, we even had some attendees from Australia. And this rapid and successful change was made possible because of our existing collaborations with NatCen and UCL and our previous experience working together.

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We had an established way of planning this conference and a good relationship upon which we could say yeah, let's try doing this new thing, let's try this new format. And it was particularly important that we were able to adapt this conference in the context of Covid because obviously it's a topic of interest

throughout the pandemic - health - but also many of the surveys had to make large changes to data collection or had edits to sample size due to being unable to access participants in the traditional way. And it was essential that we made sure that users were kept up to date with these changes and we were able to do that by changing the format of our conference.

Going forward, some of our conferences are still held online and some are in person and we explored other options and different ways of doing this, so for example we recorded our talks at the health conference last year and made them available online so there are definitely lessons that we're taking forward there and we're continuing to learn about the most useful format for our users.

Another set of events where collaboration was key were the CESSDA roadshows, so here we worked with other CESSDA service providers on two events designed to highlight useful resources.

So the COVID-19 Roadshow was co-organised with Trust IT, the Austrian data archive and the Danish data archive, and was a practical deep dive into the available COVID-19 data. We presented on the COVID-19 data available internationally and outlined where and how users could find and access this.

We also collaborated with researchers and brought them in to present on their work using some of the available data, and this event was designed to really help users internationally to discover that useful data and face the challenges of the pandemic.

After this initial event it was really great, CESSDA reached out to us to collaborate again and we presented as part of another roadshow on cancer and major chronic diseases, this collaboration involved members from NSD and UCL as well as researchers from the University of Manchester and again, we provided a deep dive into the data as well as demonstrating the catalogues and tools that could be used to access it.

And the key thing I want to highlight about this collaboration is while we were doing it we really sat and planned and collaborated to work out what each of

us could bring to the session to most benefit the attendees, so for example our expertise was in the awareness of the data available and also on training users how to search for this.

DANS and AUSSDA on the other hand brought expertise in data management, archiving and publishing, so rather than running individual events by collaborating we were able to bring the attendees a useful event with pooled knowledge from different service providers across Europe.

So now moving on to some resources, so a key resource we had early on in the pandemic is our COVID-19 theme page. If any of you have been on our website you might see this is the same format as our current theme pages, they are designed as a central hub to allow users to find the key datasets within particular themed topics.

When we initially set up this theme page there was no existing data because the pandemic was at the beginning, service hadn't been done yet, information wasn't being collected, so we started making available key data from existing surveys on topics such as poverty, pre-existing health conditions and working patterns, things that we knew would be relevant and useful to our users who were exploring the inequalities and wider things around the effects of the pandemic.

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Once the COVID-19 data began to become available, we co-ordinated with the data providers to discuss when this would be released and added to the theme page as these continued to be updated.

We also hosted links to other data sources, so for example studies from the Voluntary Sector Studies Network linking to other wider useful resources, and this went live in May 2020 and updated monthly as new data is released.

Another resource that we found really useful are the guides we created. These guides were part of the National Centre for Research Methods, ESRC funded project on changing research methods for COVID-19.

For the main guide we worked with Understanding Society to compile a guide to resources for using secondary data in the context of Covid; how this has changed, different sources of the data, access conditions and changing methodologies and then the team from Understanding Society provided an excellent case study on the benefits of linking their data with longitudinal data.

In the planning stages of this project we also met with Consumer Data Research UK, researchers again from UCL and the University of Leeds and Liverpool who'd been working on their own collaborative projects with Admin Data Research UK, the Office for National Statistics and the Joint Biosecurity Centre looking at local data spaces, so a really wide range of organisations coming together to collaborate.

And they've been asked to work on the guides too and they produced a guide on moving from primary to secondary data in the context of Covid.

So we all met as fellow members of the Data Resources and Training Network, we discussed the guides, who would be best placed to write which one, we planned together and then as I said, we featured case studies and shared our expertise. This worked really well, it meant that we could share our knowledge, highlight other data types, so we don't hold admin data at the UK Data Service but we're able to highlight that by collaborating with another organisation who does have that as an area of expertise.

And in general the DRTN as a whole was valuable throughout the pandemic. We shared experience and knowledge through online meetings and email exchange, shared information on how to run online events and the impact of the pandemic, and all of this ultimately fed back in to benefit our users.

Another resource to come out of the pandemic was the teaching dataset that we created from Understanding Society, our COVID-19 teaching dataset. This

was developed through a collaboration with the UK Data Service, ISA and Professor Sin Yi Cheung from Cardiff University and this new resource included cross sectional and longitudinal data file and simplified documentation. This is to help new users or users who are getting to grips with the topic, students, really using the data in a simplified smaller, more understandable file, and again this promotes further reuse of the data and hopefully trains up some of those future social science researchers by helping to make the data discoverable in a format that is useful for users.

So I'm nearly out of time but I'm just going to finish by sharing some knowledge that we've learnt from the collaborations and from the pandemic in general and I would like to say what made our adaptation so successful.

So I've learnt the importance of making use of existing networks, so if you're trying something new like us shifting the Health Studies User Conference online, working with existing contacts was key there. Because we'd previously worked with another organisation or the archive, it was an excellent baseline for continued collaboration.

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Secondly we learnt that strong channels of communication are essential, so for example when we were putting our theme pages together we needed strong communication both within the team, so us linking up with our collections development team who process all the new data, and also linking up with the data providers. That allowed us to be kept informed with key updates that we could then pass on to users.

Thirdly, learn that it is important to understand your area of expertise and what you can bring, so going back to the CESSDA Webinar example, I think part of the reason that that was a real success was because everyone knew what they were best placed to contribute and it really left me thinking about the importance of knowing where your skills lie both personally and organisationally.

So for example, number four, don't be put off by interdisciplinary collaborations or looking at topics outside of your expertise, so again this ties the previous point about knowing your expertise. I am not an expert in chronic disease or epidemiology but I know what I can bring and what we at the UK Data Service can bring in the events outlined is a knowledge of data discovery and that was hopefully useful to the attendees and complemented the deeper topic knowledge of the other speakers.

And finally I think it's important that we see collaborations as more than just singular one off events. When CESSDA reached out to us to return to the roadshow that's a great example of how collaborations can be ongoing. So by collaborating with them they had an idea of their expertise and what they can bring and an idea of our expertise and it helped us keep each other in mind when thinking about planning future events. It meant that we built strong networks that hopefully left us better equipped to face any future challenges.

So in summary, I hope I've demonstrated the importance of collaboration in our response to COVID-19 and the importance of utilising existing collaborative networks to help support users through changing times.

Thank you very much and please do let me know if you have any questions.

Rosie Mansfield: Hi, I'm Rosie Mansfield and today I'll be presenting a paper examining the interrelationships between social isolation and loneliness and their correlates among older British adults before and during the COVID-19 lockdown using four British longitudinal studies.

I'll firstly provide some background to the study, the research questions and our rationale for using multiple sources of data available via ESRC data resources, I'll then detail the data sources themselves and how we access them and provide an overview of the methods analysis strategy, the results and the study conclusions.

I would first like to thank UKRI for funding this research and to credit the research team working across the Centre for Longitudinal Studies and the MRC Unit for Lifelong Health and Ageing at UCL.

Myself, Giorgio, Kishin(?) and Owen were the study analysts, I coordinated the replication of analyses across the four studies for which I analysed two cohorts, Kishin and Giorgio one each and Owen led on the network analyses.

So some background to the topic, despite increased policy interest in the UK there remains a need to better understand the conceptualisation and measurement of isolation and loneliness as they're often inconsistently applied and interchangeably referred to across research policy and practice.

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Our research partner, the What Works Centre for Wellbeing, published a conceptual review in 2019 emphasising the distinction, so for the purposes of this study we define social isolation as an objective condition, something that can be quantified, for example by an individual's network size or frequency of social contact.

Of course the way in which an individual perceives and experiences their social circumstances includes a qualitative assessment of the value, function and meaning ascribed to relationships but then loneliness arises as a negative feeling associated with the perception of an inadequate quantity and/or quality of social relationships. It can therefore be experienced in the absence of isolation and vice versa, so those who are isolated may not experience loneliness.

There also tends to be a prioritisation in research and policy on loneliness with social isolation being somewhat neglected. So why focus on isolation as well as loneliness? Well, in 2021 results from the European Social Survey revealed that 8.6% of the adult population had frequent feelings of loneliness whereas 20.8% were socially isolated, it is therefore the more common experience and these findings were consistent across the study period.

It's clear that one experience can exist without the other and there's only a moderate association observed between isolation and loneliness in previous research. Both social isolation and loneliness have also been found to independently predict poor health, wellbeing, cognitive capability and mortality in older age through different mechanisms, so this provides empirical evidence for a conceptual distinction between the two constructs.

However, the investigation of objective indicators of social isolation is often neglected and there are few studies that examine the interaction between isolation and loneliness, so we aim to offer a conceptual and empirical contribution by including both isolation and loneliness in the current study.

We focused on the pandemic as the unprecedented social restrictions provided a new lens for considering the interrelationship between social isolation and loneliness in later life. Because everyone experienced the COVID-19 lockdown, the pandemic provided a unique comparison period to understand the way that isolation and loneliness relate to each other and to explore the demographic, socioeconomic and health characteristics associated with both experiences.

The Centre for Longitudinal Studies designed the COVID-19 Survey to be embedded within the cohort studies to understand the economic, social and health impacts of the COVID-19 crisis and the extent to which it widened inequalities. By embedding the Covid surveys in the longitudinal studies we had the opportunity to explore lifelong factors which shape vulnerability and resilience to Covid's effects and it also provided nationally representative population samples.

At the time of designing the study there were few studies focused on isolation and more on loneliness. There was also a lack of longitudinal studies with pre-pandemic scores and therefore few studies could infer causality, and due to the cross sectional nature of much research, few studies could tell us about the stability of demographic, socioeconomic and health characteristics associated with isolation and loneliness before and during the pandemic.

There were some studies that used different cohorts before and after the pandemic to draw comparisons, but few followed the same individuals over time and there weren't examples where multiple longitudinal datasets were used to disentangle age from cohort effects.

So we aim to overcome some of these methodological limitations by answering three research questions; so what were the levels of social isolation and loneliness and what proportion of the sample was classified into different groups? For example, isolated and/or lonely prior to and during the COVID-19 restrictions, what were the interrelationships between different social isolation indicators and loneliness prior to and during the COVID-19 restrictions and to what extent were demographic, socioeconomic factors and physical and mental health associated with isolation and loneliness in both periods?

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We used data from four British longitudinal population based studies, three were birth cohorts and one was a multigenerational ageing cohort, so there was the 1970 Birth Cohort Study, the 1958 National Child Development Study, the 1947 MRC National Survey of Health and Development and the English Longitudinal Study of Ageing, which is the multigenerational ageing cohort.

Two of the cohorts, the National Child Development Study and the British Cohort Study are managed by the Centre for Longitudinal Studies. There is a ten year age gap between these cohort members and the survey questions are pretty well aligned, and as you can see on the graph, the cohort members have been followed up at multiple time points across the life course. Both of them being birth cohorts it means that the original samples were babies born in a single week in that year in England, Scotland and Wales.

The Medical Research Council National Survey of Health and Development is the oldest of the British birth cohort studies, the initial sample was over 13,000

babies born in one week across England, Scotland and Wales in March 1946 and the study members have since been followed up over 20 times.

The English Longitudinal Study of Ageing, also known as ELSA, is a unique and rich resource of information on the dynamics of health, social, wellbeing and economic circumstances in the English population age 50 and older. It is a panel study, it's a multigenerational study and it follows individuals aged over 50 years biannually since 2002.

Data for the CLS cohorts and ELSA are openly available and free by registering with the UK Data Service. The NSHD data can be accessed by submitting an application to the MRC Unit for Lifelong Health and Ageing and variables can be searched for using Skylark which is a platform to locate metadata and it covers more than 25,000 NSHD variables. The data is now shared through the Data Safe Haven at UCL which is a secure server.

But using three successive birth cohorts and a multigenerational ageing cohort like ELSA, we could explore age effects and cohort effects in the periods prior to and during the COVID-19 restrictions in 2020. So we generated matched age bands in ELSA that mapped onto the age of the birth cohorts during the 2020 restrictions.

By comparing the results from ELSA to the cohort members that were the same age in the birth cohorts, it provided a chance to look for consistent findings due to age, so age effects, and unpick them from cohort effects, so discrepancies due to the cohort studies, which might also include differences in survey questions and methodology.

For all cohorts we had information of the outcomes, social isolation and loneliness during the COVID-19 pandemic in 2020 and at the most recent sweep prior. To answer research question three which was about the demographic socioeconomic and health characteristics associated with isolation and loneliness prior to the pandemic, we used characteristics from the time point before the most recent sweep prior to the pandemic and for

associations during Covid characteristics were taken from the most recent sweep prior. By taking these factors at a time point prior to the outcome we attempted to account for reverse causality.

All demographic, socioeconomic and health characteristics were recoded consistently across time points and cohorts, similarly social isolation indicators were harmonised across time points and studies and we generated an overall score and converted it into a binary social isolation indicator to identify cohort members that were isolated prior to and during the COVID-19 pandemic.

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Indicators of isolation included living alone, not having a partner or children, a lack of frequent contact with friends and relatives outside the household, being out of education and employment and lacking community engagement, so not attending community groups or volunteering.

For all cohorts the COVID-19 survey included the 3-Item UCLA loneliness scale, for some cohorts only individual items were included in the prior sweep, so we therefore best matched the items prior to and during the pandemic to create binary loneliness indicators.

So we know that certain groups of individuals such as males and those from more disadvantaged and less healthy backgrounds are more likely to discontinue participation in longitudinal studies, it was therefore important that we accounted for non-response to ensure that these participants were given more weight to improve the representativeness of the samples.

So item non-response was relatively low, we decided not to impute data but we applied design weights where they were applicable and non-response weights were generated for the Covid sweeps.

To understand the conceptual distinction between isolation and loneliness and assess rates of individuals experiencing isolation, loneliness or both prior to and during the pandemic we calculated the proportion of the cohort

experiencing isolation and loneliness and assessed the extent of overlap in these experiences. In addition, we investigated the associations between individual social isolation indicators, for example living alone and a lack of community engagement, with the loneliness indicator using tetrachoric correlations and visualised them using networks.

Finally to understand which demographic, socioeconomic and health characteristics were associated with isolation and loneliness prior to and during the COVID-19 restrictions we used Poisson regression models and added the characteristics in blocks. All analyses were stratified in ELSA using age bands that mapped onto the other cohorts during the pandemic to disentangle the age and cohort effects.

For study participants in their 50s in both BCS and ELSA slightly more people reported being socially isolated during the pandemic, as would be expected, so it went from 15% to 23% isolated pre and during Covid in BCS, and in ELSA it was 23% up to 26% in the pandemic.

A slight increase in loneliness and overlap between the two experiences were seen in ELSA but slightly lower reported loneliness during Covid were seen in BCS. Overall, higher rates of both isolation and loneliness could be seen in ELSA showing a cohort difference which potentially could be due to differences in measurement.

For those in their 60s there was a big difference between ELSA and the 1958 birth cohorts, there were much higher rates of loneliness at both time points in ELSA and a slight increase in both isolation and loneliness from pre-Covid to during the 2020 restrictions. Much larger proportion of the NCDS cohort members were reporting isolation compared with loneliness at both time points, for example pre-Covid there were 23% reporting social isolation and under 3% reporting loneliness, this increased to 35% reporting isolation and only 5% loneliness during Covid.

The overlap between the two experiences remained quite constant for both cohorts pre and during Covid but we did see a slight increase with a greater overlap in ELSA, around 11-13% experiencing both.

With age we saw an increased number of people reporting social isolation and loneliness in ELSA. For those in their 70s during Covid we saw rates of around 37% socially isolated and 20% lonely, these results support findings from the European Social Survey that overall more people are isolated than lonely, which supports a conceptual distinction between the two constructs.

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Finally we sadly see very high rates of isolation and loneliness both prior to and during the pandemic in the oldest group of participants aged 80 plus in ELSA. This group were not matched with any participants from the birth cohorts given that the oldest cohort, NSHD, had cohort members aged 70 in 2020.

On the right you can see that within ELSA the multigenerational cohort there's a steady increase both before and during Covid in the rates of isolation as age increases, with over 50% of the sample aged over 80 reporting isolation before and during the pandemic.

Tetrachoric correlations, so correlations for the binary variables, were run between all indicators of isolation, so living alone, having no children or partner, limited contact with friends and relatives outside the household, being out of education and employment and limited community engagement as well as the loneliness variables in NCDS, BCS and ELSA. Networks could not be estimated in NSHD due to a non-positive definite correlation matrix and this was likely due to a tetrachoric correlation of one between living alone and partner status i.e. all cohort members who lived alone also had a partner and this was likely a result of the advanced age of the cohort.

Within the NCDS and BCS cohorts and also within all age bands in ELSA the networks were broadly similar pre and during Covid particularly for the

strongest edges. In NCDS and BCS loneliness was directly correlated with all measures of social isolation prior to and during the pandemic.

Prior to the pandemic loneliness was most strongly associated with being out of education and employment, living alone and having less than weekly contact with friends in the NCDS cohort, during the pandemic having no partner was most strongly associated with loneliness in this cohort followed by living alone and being out of education and employment.

For the 1970 BCS cohort the strongest pre-pandemic correlates of loneliness were living alone, being out of education, employment and no community engagement, living alone, having no partner and being out of education and employment were the strongest correlates of loneliness in BCS during the pandemic.

In ELSA the four indicators of self-reported loneliness and social isolation formed a strongly connected cluster of nodes. Both prior to and during the pandemic the strongest bridges between objective and subjective indicators of isolation were between the living alone, has no partner, lacks companionship and feels lonely.

When investigating the demographic, socioeconomic and health characteristics associated with isolation and loneliness prior to and during the COVID-19 restrictions, we found that female gender, manual occupation, self-reported financial difficulties, not being a homeowner and having a limiting longstanding illness and lower life satisfaction were consistently associated with both isolation and loneliness, for loneliness we also see that not having a degree and greater psychological distress were also associated.

We didn't see any notable differences in the strength of associations pre-pandemic and during the lockdown period, indicating that the inequalities existed prior to Covid and were maintained and slightly exaggerated by the pandemic.

In conclusion, pre-pandemic proportions reporting social isolation ranged from 15% to 54% with higher rates in older ages. During the pandemic the percentage of older people reporting both social isolation and loneliness and isolation only, slightly increased but the interrelationship between isolation and loneliness did not change. Associations between sociodemographic and health characteristics and isolation and loneliness also remained consistent, with a greater burden among those with higher economic precarity, so that's females, non-homeowners, unemployed, those with longstanding illness and greater financial stress.

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There were already large inequalities and experiences of isolation and loneliness and the pandemic had a small impact on worsening extent and inequalities. The concept of loneliness and isolation are not interchangeable and clarity is needed in how they are conceptualised, operationalised and interpreted. There should be greater emphasis on reducing social isolation in older adults and inequalities in experiences.

So given higher rates of isolation particularly in the elderly in society, it should be prioritised by policymakers. Focusing on objective indicators of isolation as well as loneliness helps to identify areas that are modifiable through policy to increase social contact amongst the most vulnerable groups.

This paper is published in 'Innovations in Ageing' and is open access. Our partner, the What Works Centre for Wellbeing, has also written a blog post summarising the findings and they have written up other findings from the wider project which you can access via the bottom link.

Thank you very much for listening and I'm very happy to take any questions.

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