

Multimorbidity, access to services and diagnosis of new health conditions during the COVID-19 pandemic

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EXECUTIVE SUMMARY

Excess deaths from conditions other than COVID-19 have been reported during the COVID-19 pandemic. Reduced access to health and social care services during lockdown may have disproportionately affected older people and those with multiple medical conditions. The English Longitudinal Study of Ageing COVID-19 Substudy provided an opportunity to evaluate older people's experiences of receiving needed health and social care, and changes in reported anxiety, depression and loneliness.

We found that the rates of diagnosis of new conditions during the pandemic in the second half of 2020 were substantially different from the pre pandemic rates reported in 2018 to 2019. Rates of newly diagnosed dementia dropped to below half the pre pandemic rate for reasons that are not clear. The increased isolation during lockdown may have meant that cognitive decline went unnoticed by friends and relatives, or barriers to accessing healthcare may have been experienced more by those with early dementia. Conversely, other conditions were diagnosed more frequently than before the pandemic, including arthritis, chronic lung disease, diabetes and hypertension. Again, the reasons for these increases are not clear, but fewer opportunities for physical activity and social interaction may have played a part.

Those with multiple medical conditions were more likely to be unable to access healthcare, and 1 in 5 of them had a hospital operation or treatment

cancelled. We found that mental health worsened during the pandemic, with higher reported rates of anxiety, depression and loneliness, and again the rise was steeper for respondents with multimorbidity. These results show that older people experienced poor mental health and difficulty accessing basic health care during the pandemic, and those with multiple conditions and early dementia had the greatest difficulties. Particular attention should be paid to the health needs of these vulnerable groups as health care access improves and the backlog of cancelled and delayed care is addressed.

Key findings

- Dementia diagnosis rates dropped during the pandemic in June/July 2020 and November/December 2020 to below half of the pre pandemic rate
- Diagnosis rates for arthritis, chronic lung disease, diabetes and hypertension all increased during the pandemic
- 43% of respondents reported being unable to access their GP during the pandemic, and this rose to 55% for respondents with multimorbidity
- More than half of all respondents reported being unable to access a dentist
- 12% of respondents had a hospital operation or treatment cancelled and this rose to 20% for those respondents with multimorbidity. Of those, over half were still waiting in November/December 2020 for their hospital operation or treatment to be rescheduled
- Levels of anxiety, depression and loneliness increased substantially during the pandemic, and the rise was steeper for respondents with multimorbidity

Introduction

Excess deaths from conditions other than COVID-19 have been reported during the pandemic. Many people had trouble accessing healthcare and other key services during the restrictions in place during lockdown. Access to healthcare largely moved online, and this may have created extra barriers for older people and those with multiple conditions.

Here, we describe diagnosis of new conditions, multimorbidity prevalence, changes in access to community health and social care services and hospital operations or treatments, and reported anxiety, depression and loneliness for those with and without multimorbidity.

Definition

Respondents aged 50 years and older in three waves of the English Longitudinal Study of Ageing were asked whether, since their last interview, a doctor had told them that they had developed any of 11 medical conditions: hypertension, angina or heart attack, heart failure, diabetes, stroke, chronic lung disease, asthma, arthritis, cancer, dementia, or blood disorder. Multimorbidity was defined as reporting two or more of these conditions, in 2020 or at previous ELSA waves.

Anxiety was assessed using the Generalised Anxiety Disorder assessment (GAD-7) (Spitzer et al, 2006). Items referred to the past two weeks and were each rated on a 4-point scale from 'not at all' to 'nearly every day'. A standard threshold of 10 was used to define significant symptoms. Symptoms of depression were measured by an abbreviated seven-item version of the validated Centre for Epidemiologic Studies Depression Scale (Beekman et al, 1997). Respondents who reported three or more depressive symptoms in the week prior to the interview were classified as being depressed. Loneliness was assessed with the short-form UCLA loneliness scale (Hughes et al, 2004), in which a score of 6 or more indicates that the person felt lonely some or all of the time.

Results

Receipt of a new diagnoses

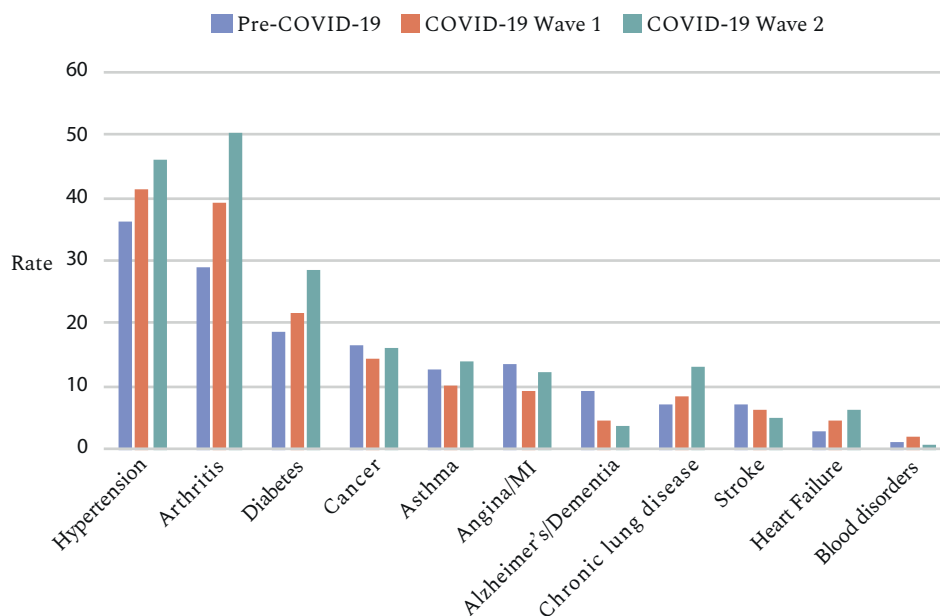
7,289 core ELSA members participated in pre-COVID-19 (ELSA Wave 9) in 2018 to 2019; 5,825 in COVID-19 Wave 1 in June and July 2020; and 5,339 in COVID-19 Wave 2 in November and December 2020.

The overall rate of receipt of new diagnoses (**Figure 1**) reported per 1,000 participants per year was 116.76 in Pre-COVID-19 (n=7,289), 110.10 in COVID-19 Wave 1 (n=5,825), and 138.23 in COVID-19 Wave 2 (n=5,339).

Receipt of diagnosis rates dropped from pre-COVID-19 to COVID-19 Wave 1 to COVID-19 Wave 2 for dementia (9.09 to 4.35 to 3.58 respectively) and stroke (7.05 to 6.41 to 5.02).

Diagnosis rates increased for arthritis (29.11 to 39.26 to 50.59), chronic lung disease (7.18 to 8.58 to 13.28), diabetes (18.83 to 21.85 to 28.35) and hypertension (36.28 to 41.20 to 46.29).

Figure 1. Rate* of receipt of new diagnoses in each of the 3 waves



*Rate for each wave: number of new diagnoses/1000 core members/ years since last interview.
Source: ELSA Pre-COVID-19 Wave 9 (2018/2019) and ELSA COVID-19 Substudy (June/July 2020 and November/December 2020). Weighted data.

Multimorbidity and access to services

The overall prevalence of people reporting multimorbidity (two or more conditions) at ELSA COVID-19 Wave 2 was 25%.

Respondents were asked about whether they had been able to access the community health and social care services and support they needed (general practitioner, dentist, routine healthcare checks, podiatrist, community nurse, counselling for depression or anxiety or other mental health services, personal care, or other). A greater percentage of people with multimorbidity, compared to those without, reported not being able to access community health and social care services and support (20% vs 28%). Respondents with multimorbidity were more likely than people without multimorbidity to report not being able to access their general practitioner (55% compared to 37%), routine healthcare checks (17% compared to 11%), and counselling for mental health (9% compared to 4%). The only exception was being unable to access a dentist, which was reported by 59% of respondents without multimorbidity and 43% with multimorbidity. However, over half of all respondents reported being unable to access a dentist, more than for any other service (Table 1).

Table 1. Percentage of respondents reporting disruptions accessing community health and social care services according to multimorbidity status, ELSA COVID-19 Substudy Wave 2

	No multimorbidity	Multimorbidity	Total	Significance ¹
Any disruption	20.3%	28.4%	22.3%	<0.001
GP	37.2%	54.8%	42.7%	<0.001
Dentist	59.4%	42.8%	54.2%	0.009
Routine healthcare checks	10.5%	17.2%	12.6%	0.031
Podiatrist	5.3%	9.7%	6.7%	0.061
Community Nurse	1.9%	4.4%	2.7%	0.071
Counselling for mental health	3.5%	9.3%	5.4%	0.009
Personal care	1.2%	4.6%	2.2%	0.062

¹ Significance of differences between groups obtained in logistic regression, controlling for age, gender, household composition, and partnership status. Any disruption was calculated on all respondents (N=5532). Specific disruptions were calculated on respondents who reported a disruption (sample N=1092). ELSA COVID-19 Substudy (November/December 2020). Weighted data.

Hospital operations or treatments

In the ELSA COVID-19 Wave 2 (November/December) respondents were asked whether they had an operation or treatment cancelled since the pandemic started. Those reporting a cancelled operation or treatment were further asked whether the operation or treatment was rescheduled but not yet carried out, rescheduled and carried out, waiting to be rescheduled or no longer needed. Overall, 12% of ELSA respondents reported having a hospital operation or treatment cancelled. However, this percentage was higher for respondents with multimorbidity (20%) than for those without (9%). The most common procedures cancelled were eye surgery (13.8%) and cancer-related related treatment (13.0%). People with multimorbidity were more likely to have had a heart-related treatment or procedure cancelled than those without multimorbidity (14.2% vs 3.5% respectively).

Among those who had a hospital operation or treatment cancelled, a greater percentage of respondents with multimorbidity compared to those without multimorbidity were still waiting for the operation or treatment to be rescheduled (54% vs 41%). Conversely, 32% of respondents without multimorbidity had the cancelled operation or treatment rescheduled and carried out by November/December 2020, compared to only 19% for those with multimorbidity ([Table 2](#)).

Table 2. Percentage of respondents reporting hospital operations or treatments cancelled between March and December 2020, according to multimorbidity status

	No multimorbidity	Multimorbidity	Total	Significance ¹
Hospital operation or treatment cancelled	8.9%	19.7%	11.5%	<0.001
Type of operation or treatment cancelled				
Cancer-related	13.4%	12.5%	13%	0.831
Heart-related	3.5%	14.2%	8.0%	<0.001
Joint replacement	9.7%	6.6%	8.4%	0.661
Eye surgery	11.7%	16.7%	13.8%	0.329
Dental	5.5%	2.2%	4.1%	0.080
Operation or treatment				
Rescheduled but not yet carried out	22.4%	22.0%	22.3%	0.451
Rescheduled and carried out	32.1%	19.0%	26.6%	0.003
Waiting to be rescheduled	40.7%	54.1%	46.3%	0.001
No longer needed	4.8%	4.9%	4.8%	0.776

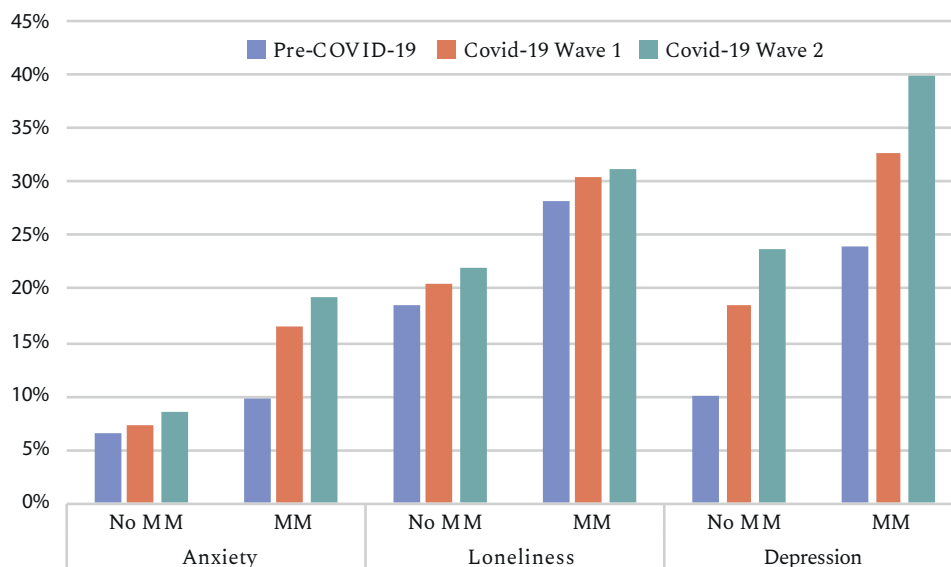
¹ Significance of differences between groups obtained in logistic regression, controlling for age, gender, household composition and partnership status. Overall cancellations were calculated among all participants (N=5532) whereas for other rows analyses were limited to those who reported a cancellation (sample N=632). ELSA COVID-19 Substudy (November/December 2020). Weighted data.

Mental health

In this section we report the prevalence of anxiety, depressive symptoms and loneliness in those with and without multimorbidity, during the pandemic and before the pandemic (ELSA wave 9, collected in 2018-2019).

The proportions of people with anxiety, depression (4+ symptoms) and loneliness (score >6) are summarised in [Figure 2](#). At each assessment point, a greater proportion of people with multimorbidity had anxiety, depression and loneliness compared with participants without multimorbidity ($p<0.001$). Among people with multimorbidity, levels of anxiety increased from 9.7% before the pandemic (ELSA Wave 9) to 19.3% ($p<0.001$) in COVID-19 Wave 2 (November/December 2020); levels of depression increased steeply from 24% before the pandemic to 40% ($p<0.001$) in COVID-19 Wave 2 (November/December 2020); the slight change in levels of loneliness was not statistically significant (from 28.2% to 31.1%; $p=0.363$). People without multimorbidity also reported increased levels of anxiety (from 6.6% to 8.5%; $p<0.05$), depression (from 9.9% to 23.7%; $p<0.001$) and loneliness (18.6% to 22%; $p<0.01$), however the increase was not as steep as in people with multimorbidity.

Figure 2. Anxiety, depression and loneliness in 2018/2019 and in June/July 2020, November/December 2020 according to multimorbidity status



Source: Pre-COVID-19 Wave 9 (2018/2019) and ELSA COVID-19 Substudy (June/July 2020 and November/December 2020). Weighted data.

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The ELSA COVID-19 Substudy has obtained full ethical and data protection approval and is fully GDPR compliant. For further information, please contact ELSA@ucl.ac.uk

This report and other ELSA publications, including the ELSA COVID-19 Substudy methodological report, are available from www.elsa-project.ac.uk

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