Women and Equalities Committee inquiry: Mental health of men and boys

Written submission from CLOSER, the home of longitudinal research (MHM0037)

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1. Summary

1.1 CLOSER is a collaboration of world-class social and biomedical longitudinal studies, the British Library and the UK Data Service, funded by the Economic and Social Research Council (ESRC) and Medical Research Council (MRC).

1.2 The UK's longitudinal studies are recognised as vital sources of evidence on how early circumstances and experiences affect people's lives from childhood to adulthood. They provide insights into short and long-term change and the relationship between different elements of people's lives that cannot be obtained from any other data sources. Birth cohort studies in particular allow us to explore and understand the complex links between childhood experiences and their impact on long-term outcomes.

1.3 Evidence suggests that most adult mental health disorders start in childhood. By studying individuals throughout their lives (often from early life into adulthood), longitudinal research is uniquely placed to help identify the factors that are contributing to these disorders later on in a person's life. The studies typically collect a rich array of information, allowing insights into how different areas of life intersect.

1.4 Research using the CLOSER studies has found evidence for an association between father absence in early childhood and increased odds of depressive symptoms at age 14 years, that men of the 1970 generation were more likely than those born in 1958 to report symptoms of poor mental health at age 42, and that at age 14, one in 10 (9%) boys in the Millennium Cohort Study reported experiencing high levels of depressive symptoms.

1.5 There is limited research examining fathers' influence on adolescent mental health, especially when compared to the numerous studies of maternal influence. This is due to a number of reasons, including survey cost implications of following individuals in families spread across multiple households, that fathers are less likely to be interviewed than mothers in social surveys, and much of the information about fathers is gathered from their partner and sometimes their children. By contrast, most information about mothers is gathered directly. Furthermore, linkage of longitudinal survey data with health records, which is currently underdeveloped in England, would provide a more

complete picture of people's' life stories and help to better understand how different aspects of their lives interrelate.

1.6 CLOSER is funding a number of research projects which seek to improve the evidence base, including on awareness and understanding of mental health and wellbeing, allowing comparison across time and study, and producing open-source software for secure linkage of Twitter data to help researchers to understand human behaviour, including whether people develop good or poor mental health.

1.7 The relevant longitudinal data collected by the CLOSER studies are currently underutilised, therefore presenting a number of opportunities for further research and analysis into the mental health of men and boys. There is a need for a renewed focus on this topic, which could be aided by an explicit statement of research needs in a refreshed Department of Health and Social Care Areas of Research Interest (ARI).

2. About CLOSER

2.1 CLOSER, the home of longitudinal research, is an interdisciplinary partnership that brings together world-leading longitudinal studies with participants born throughout the 20th and 21st centuries, the British Library and the UK Data Service. [1]

2.2 Our work aims to maximise the use, value and impact of the UK's longitudinal studies in order to help improve our understanding of key social and biomedical challenges.

2.3 There are currently eight studies in CLOSER: four national and three regional birth cohort studies and Understanding Society (the UK Household Longitudinal Study). [2]

2.4 CLOSER is funded by the Economic and Social Research Council (ESRC) and Medical Research Council (MRC).

3. Longitudinal evidence

3.1 Evidence suggests that most adult mental health disorders start in childhood. By studying individuals throughout their lives (often from early life into adulthood), longitudinal research is uniquely placed to help identify the factors that are contributing to these disorders later on in a person's life. The studies typically collect a rich array of information, allowing insights into how different areas of life intersect. [3]

3.2 The CLOSER studies that ask questions and collect data on men and boys' mental health and wellbeing are the Hertfordshire Cohort Study, MRC National Survey of Health and Development (NSHD), 1958 National Child Development Study (NCDS), 1970 British

Cohort Study (BCS70), Avon Longitudinal Study of Parents and Children (ALSPAC), Millennium Cohort Study (MCS) and Understanding Society.

3.3 Questions are asked about participant's mental health and wellbeing, if any problems in their father's (or father figure's) mental health has affected them in any way, peer relationships and occurrence and impact of, for example, bullying.

3.4 There is a paucity of studies examining the effects of timing of biological father absence on risk of depressive symptoms in adolescence. To help address this, research using ALSPAC looked at the association between father absence occurring in the first five years and middle childhood and adolescent depressive symptoms in 5,631 children. This found evidence for an association between father absence in early childhood and increased odds of depressive symptoms at age 14 years. Note this association was stronger in girls than boys and remained after adjusting for a range of socio-economic, maternal and familial confounders [4] assessed prior to the fathers' departure. [5]

3.5 Further research using ALSPAC data found that almost one in 20 new fathers suffered from depression in the weeks after their child was born. The study investigated the association between paternal depression in the postnatal period on the development of adolescent depression. Whilst the findings indicate that adolescent offspring of fathers who have depression during the postnatal period are at increased risk of experiencing depression symptoms at age 18 years, the increased risk is seen in girls but not boys. [6]

3.6 Findings from the 1958 and 1970 British birth cohort studies showed that the 1970 generation was more likely than those born in 1958 to report symptoms of poor mental health at age 42, such as often feeling depressed, anxious or irritable. The increase in psychological distress was more prominent in men. Among those born in 1958, 10 per cent of men suffered from distress, compared to 16 per cent of those born in 1970. Although women were more likely than men to report poor mental health in both generations, the rate rose less sharply for them – from 16 per cent in 1958 to 20 per cent 12 years later. In men, having conduct and emotional problems at age 16 and seeing their parents' divorce had a small effect in explaining the differences in psychological distress between the two groups in early middle age. [7]

3.7 At age 14, 9,553 participants of the Millennium Cohort Study answered questions about their mental health difficulties for the first time (previously, at age 11, children's mental health was reported by parents). They completed the Short Moods and Feelings Questionnaire (SMFQ) which assesses symptoms of depression. This found that, at age 14, one in 10 (9%) boys reported experiencing high levels of depressive symptoms, compared to almost one in four (24% girls). Boys of Asian ethnicity were

significantly less likely (4 percentage points) than White adolescents to report suffering from high depressive symptoms. Factors, such as being overweight, not getting along with peers and being bullied, were associated with high depressive symptoms. [8]

4. Missing data and evidence gaps

4.1 Fundamentally, there is a lack of data and subsequent evidence on the mental health of men and boys. Much of the existing research focusses on the mental health and wellbeing of mothers and their children, particularly how a mother's mental health affects her child's. However, the UK's longitudinal studies have regularly collected data on the mental health of men and boys and research using the studies has examined, for example, the impact of fathers' postnatal depression and also how children are affected by their fathers' absence in the early years in their later life. This data, however, is currently underutilised.

4.2 In 2018, CLOSER hosted a seminar [9] at which the Fatherhood Institute [10] presented their review of 16 large-scale repeated cross-sectional and longitudinal datasets, and suggestions on how they could be improved to help researchers and policymakers better capture the diversity of fatherhood in modern Britain. This uncovered gaps and inconsistencies of how information about fathers and father-figures is recorded and collected in Britain's main research and statistical datasets. [11]

4.3 To help fill these evidence gaps and support world-class research, CLOSER is funding a number of innovative research projects which 1) will improve the awareness and understanding of mental health and wellbeing, 2) allow comparison across time and study, and 3) produce open-source software for secure linkage of Twitter data to help researchers to understand human behaviour, including whether people develop good or poor mental health. These three research projects are outlined below:

4.4 <u>Maximising the take-up of mental health measures from UK cohorts and longitudinal studies</u>

This project aims to improve the awareness and understanding of mental health and wellbeing by organising, generating and sharing information about current mental health and wellbeing measures. This project will be the first to comprehensively document measures of mental health and wellbeing within the UK's longitudinal studies.

The team will carry out a mapping exercise to identify and document existing measures of mental health and wellbeing within the studies, and then share this information publicly through an online platform. It also plans to promote and maximise the use of

the studies' mental health measures to researchers through workshops and activity sessions, especially researchers and users from disciplines that do not typically use mental health data. [12]

4.5 Harmonisation of mental health measures in British birth cohorts

This project aims to harmonise (make comparable) existing mental health measures over the life course in five British birth cohorts. Across the CLOSER studies, the measures of mental health that have been collected vary across the different studies and within the same study over time.

Using the documentation put together in other CLOSER research to maximise the take-up of mental health measures from UK cohorts and longitudinal studies, this project will identify mental health measures in the different studies and investigate their measurement properties, before harmonising these so that they can be compared across time and study.

These harmonised measures will allow the project to investigate and compare the development of psychological distress over the life course in different generations, as well as test whether mental health is improving or declining in more recently born cohorts that are expected to live longer. [13]

4.6 Framework for linking and sharing social media data for high-resolution longitudinal measurement of mental health across CLOSER cohorts

Interactions on social media have the potential to help researchers to understand human behaviour, including whether people develop good or poor mental health. To do the best science, it is important to know as much as possible about the people who are participating in the research. The longitudinal studies that make up the CLOSER consortium include people who have contributed their data to research since birth. By inviting participants in these studies to also allow researchers to derive information from their social media feeds, it will be possible to relate this information to gold-standard measures of behaviour and other aspects of life collected by the studies.

To work out the best way to do this, this project will engage with participants in the Avon Longitudinal Study of Parents and Children (ALSPAC) to find out what is acceptable to them in terms of collecting and using their interactions on social media. This will inform the development of software that collects and codes social media data while protecting the anonymity of participants, by scoring Tweets without making the text available to researchers.

This software will be shared with other studies in the CLOSER consortium to make it easy for them to invite participants to contribute their Twitter data in a safe and secure way. The high-resolution data collected in this way will help researchers to understand

human behaviour and how a person's mental health changes over time. Collecting these data in well-known groups of people will also give scientists the information they need to improve the quality of other research using social media. [14]

5. Recommendations

5.1 Policymakers should recognise the importance of identifying and treating depression in fathers during the postnatal period and consider both parents when one parent presents with depression.

5.2 Policymakers and education practitioners should consider strategies that take into account children's wider circumstances, including school connectedness and peer relationships.

5.3 Depression prevention and intervention programmes targeting children exposed to father absence early in childhood may help to reduce depressive symptoms in this group.

5.4 A renewed focus on this topic would be aided by an explicit statement of research needs in a refreshed Department of Health and Social Care Areas of Research Interest (ARI). Furthermore, the ability to link longitudinal survey data to health records would provide a more complete picture of participants' life stories and vastly improve our understanding of how different aspects of people's complex lives interrelate.

6. About the CLOSER studies

6.1 The **Hertfordshire Cohort Study** comprises a nationally unique study of 3,000 men and women born during the period 1931-1939 and still resident in the English county of Hertfordshire during the 1990s. The principal objective of the study is to evaluate the relationship between early (prenatal and early postnatal) growth, genetic influences, adult lifestyle and the risk of common age-related disorders such as osteoporosis, osteoarthritis, sarcopenia, type 2 diabetes and cardiovascular disease. The study has been a key source of evidence for lifecourse influences on health and disease in later life.

6.2 The **1946 MRC National Survey of Health and Development** is the oldest and longest running of the British birth cohort studies comprising of men and women born in England, Scotland or Wales in March 1946. Today, with study members in their seventies, the study is a leading source of evidence on the long-term biological and social processes of ageing and how ageing is affected by factors acting across the whole of life.

6.3 The **1958 National Child Development Study** follows the lives of 17,415 people born in England, Scotland and Wales in a single week of 1958. It has tracked the lives of study members to reveal how the different educational and other paths people take affect their wages, jobs, relationships, and health later in life. It has also been used to uncover genetic risks for a range of diseases.

6.4 The **1970 British Cohort Study** follows the lives of 17,198 people born in England, Scotland and Wales in a single week of 1970. The study has shown the importance of reading for pleasure for children's cognitive development, especially in vocabulary and spelling, but also in maths.

6.5 The **Avon Longitudinal Study of Parents and Children** charts the lives of 14,500 people born in the former county of Avon between April 1991 and December 1992 as well as the lives of their parents and their children. It is rich resource for the study of the environmental and genetic factors that affect a person's health and development throughout their life.

6.6 The **Southampton Women's Survey** is the only birth cohort study in Europe in which the mothers were recruited before conception of the child. The aim of the study is to assess the influence of maternal dietary, lifestyle, intrauterine, genetic and epigenetic factors on the children's health and development, and on the health of the mothers themselves.

6.7 The **Millennium Cohort Study** follows the lives of 19,517 children born across England, Scotland, Wales and Northern Ireland in 2000-01. The study has provided important evidence to show how circumstances in the early stages of life can influence later health and development, including that children who are breastfed tend to be healthier and to show better cognitive development and that children born in the summer months were more likely to be placed in lower ability groups than their autumn-born peers.

6.8 **Understanding Society**: The UK Household Longitudinal Study follows the lives of all individuals within 40,000 households over time. It covers the whole population, with boost samples to ensure it is representative of immigrant and ethnic minority groups, and its large sample enables sub-population groups to be examined. The study includes data on key domains of people's lives – their family, health, wellbeing, employment, education, income, expenditure, wealth, time use, behaviours, housing, transport and neighbourhoods, attitudes and beliefs – which enables researchers to investigate the inter-relations between different aspects of people's lives.

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7. References

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