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Original Research

Alcohol consumption after health deterioration in older adults: a mixed-methods study

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ABSTRACT

Objective: To examine if and how older adults modify their drinking after health deterioration, and the factors that motivate changing or maintaining stable drinking behaviour.
Study design: Explanatory follow-up mixed-methods research.
Methods: The association between health deterioration and changes in alcohol consumption was examined using secondary data from the English Longitudinal Study of Ageing, a biennial prospective cohort study of a random sample of adults aged 50 years and older living in England. Data were collected through a personal interview and self-completion questionnaire across three waves between 2004 and 2009. The sample size (response rate) across the three waves was 8781 (49.9%), 7168 (40.3%) and 6623 (37.3%). The Chi-squared test was used to examine associations between diagnosis with a long-term condition or a worsening of self-rated health (e.g. from good to fair or fair to poor) and changes in drinking frequency (e.g. everyday, 5–6 days per week, etc.) and volume (ethanol consumed on a drinking day) between successive waves. In-depth interviews with 19 older adults recently diagnosed with a long-term condition were used to explore the factors that influenced change or maintenance in alcohol consumption over time. A purposive sampling strategy was used to recruit a diverse sample of current and former drinkers from voluntary and community organizations in the north of England. An inductive approach was used to analyze the data, facilitating the development of an *a posteriori* framework for understanding drinking change.
Results: There was no significant relationship between health deterioration and changes in drinking volume over time. There was however a significant association between health deterioration and changes in drinking frequency between successive waves ($\chi^2 = 15.24$, $P < 0.001$ and $\chi^2 = 17.28$, $P < 0.001$). For example, of participants reporting health deterioration between the first two waves, 47.6% had stable drinking frequency, 23.4% increased their drinking frequency and 29% reported decreased drinking frequency. In comparison, of participants reporting no health deterioration, 52.7% reported stable frequency, 20.8% increased frequency and 26.4% decreased frequency. In qualitative interviews, older adults described a wide range of factors that influence changes in drinking behaviour: knowledge gained from talking to healthcare professionals, online and in the media; tangible negative experiences that were attributed to drinking; mood and emotions (e.g. joy); the cost of alcohol; pub closures; and changes in social roles and activities. Health was just one part of a complex mix of factors that influenced drinking among older adults.

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Conclusion: Patterns of drinking change after health deterioration in older adults are diverse, including stable, increasing and decreasing alcohol consumption over time. Although health motivations to change drinking influence behaviour in some older adults, social and financial motivations to drink are also important in later life and thus a holistic approach is required to influence behaviour.

Introduction

Alcohol consumption is a leading risk factor for chronic disease and injury, with an estimated 3.8% deaths and 4.6% disability-adjusted life-years attributable to alcohol globally.[1] In England in 2012–2013 there were over one million alcohol-related hospital admissions[2] and in the UK in 2013 there were 8416 alcohol-related deaths.[3] Average alcohol consumption in the UK is 9.7 litres of pure ethanol per capita a year aged 15 years and older,[4] although rates of abstention from alcohol increase whilst mean drinking volume and heavy episodic drinking decrease with increasing chronological age.[5] Broad population level trends of declining consumption with increasing age may hide varying subgroup changes in alcohol consumption, as longitudinal studies from Europe, the USA and Australasia that explore alcohol consumption over time in older adults illustrate heterogeneity of drinking.[6–11] As such, it is important to examine individual level changes in consumption in older adults to understand how drinking changes and why in this population.

Explanations proposed for reduced drinking with increasing age include decreasing socialization,[12] a decline in income upon retirement[13] that makes alcohol less affordable, ageing associated bodily changes that increase the risk of experiencing adverse health outcomes from consuming a given level of alcohol (e.g. increased body fat and body water and inefficiency of liver enzymes[14–16]) and ill health and premature mortality.[12] Individuals with deteriorating health may disengage from drinking settings due to poorer health (e.g. nursing home admission), be prescribed alcohol-incompatible medications, or receive advice to drink less from healthcare professionals.[17–20] In England 71% adults aged 65 years and older report at least one long-term condition (LTC),[21] and alcohol can worsen the symptoms of LTCs,[22] influence self-care behaviours[23] and interact with medications.[24]

When people experience problems with their health (e.g. diagnosis with an LTC or hospitalization) they are more likely to reduce their alcohol intake or abstain.[7,11,25,26] However, drinking behaviour is not always modified in response to ill health, with reports of stable alcohol consumption or even increased drinking, for example where alcohol is used to help manage chronic pain or heart disease.[27,28] Recent cross-sectional research in England did not identify comorbidity (with a range of LTCs) to be associated with alcohol consumption in older adults.[29]

Whilst previous research contributes to our understanding of alcohol consumption behaviour change after health deterioration in older adults, it may have limited generalizability to the UK as much of the research originates from the USA where levels of drinking among older adults are lower and abstention rates are higher.[30] Further, previous research has not used qualitative methods to examine the factors that older adults identify as motivating their alcohol consumption behaviour after changes in health. The aim of the current research was to examine if and how older adults modify their drinking after health deterioration, and the factors that motivate changing or maintaining stable drinking over time. This will inform the development of health-promoting interventions to prevent alcohol-related harm in our ageing population.

Methods

An explanatory follow-up mixed-methods study[31] was developed to explore alcohol consumption behaviour following health deterioration (diagnosis with a long-term condition or worsening of self-rated health) in older adults.[32] Phase 1 examined the association between health deterioration and alcohol consumption using the English Longitudinal Study of Ageing (ELSA) to develop an understanding of how drinking behaviour changes over time. Phase 2 used in-depth interviews to explore the motivations underlying drinking stability and change among individual drinkers. Ethical approval was granted by the School of Health and Related Research Ethics Committee at the University of Sheffield.

Phase 1

ELSA is a prospective cohort study of adults aged 50 years and older living in private households in England. The ELSA sample was recruited from respondents to the Health Survey for England (HSE) in 1998, 1999, and 2001, who were born before 1st March 1952. The HSE is an annual cross-sectional survey of households selected using a multistage stratified probability sample drawn from the Postcode Address file, which has 99% coverage in England.[33] ELSA data are recorded biennially on a range of demographic, financial and health variables. Data are collected by the National Centre for Social Research through a personal interview and self-completion questionnaire.[33] For the current study, data from Waves 2 (2004–2005), 3 (2006–2007) and 4 (2008–2009) were downloaded in SPSS format from the Economic and Social Data Service. Sample sizes (response rates) respectively are 8781 (49.9%), 7168 (40.3%) and 6623 (37.3%).