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Life course influences and well-being in later life: a review

by Karen Glaser, Debora Price, Rosalind Willis,
Rachel Stuchbury and Malcolm Nicholls

Institute of Gerontology, King's College London
and Department for Work and Pensions



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Executive summary

The Equality and Human Rights Commission (the Commission) is working in partnership with Age Concern and Help the Aged on a programme of seminars and research called 'Just Ageing?' examining equality and ageing. The purpose of the programme is to investigate (and develop understanding of) the dynamics of inequality over the life course.

A systematic review of the literature on the impact of life course influences (trigger events and long-term experiences) on health and well-being in later life was commissioned as part of this programme.

Overall, this report finds a considerable literature on the association between life course factors and health (and mortality in particular) at older ages, but less research on the impact of these factors on later life financial circumstances or social support. In general, the most commonly studied trigger events are onset of retirement, loss of a spouse and onset of a disability. Little work has explored the association between health and well-being and other trigger events such as becoming a grandparent, becoming a carer, the experience of a significant financial loss (for example, losing one's savings or pension), receiving an inheritance, and moving home or abroad.

Researchers have also begun to explore the association of paid work, parenthood and partnership histories on health and well-being in later life. Health researchers have largely studied the impact of family histories with less work examining the

impact of work histories. Research on the impact of cumulative life events on support in later life is sparse and has largely focused on marital histories.

Life course factors and financial well-being (income and poverty) in later life

- Onset of retirement, loss of a spouse and onset of disability are the three most commonly studied life events affecting later life poverty and low income. The literature shows all of these trigger events to be associated with lower incomes and poverty at older ages. Many studies show that education, social class and disability continue to be important predictors of later-life poverty.
- Pensioner poverty has fallen between 1997 and 2008, partly due to improvements in pension credit. Women and people from ethnic minority groups have been found to be more likely to have low incomes and be poor at older ages.
- Contrary to what was expected, a small body of emerging evidence suggests that work and marital histories are not important in determining low income in later life once other factors such as occupation and education are taken into account. But other studies show that women who are out of the labour force for longer periods of time and had children, those who are divorced and do not remarry, are at greater risk of poverty.

Life course factors and health (mortality and morbidity) in later life

- Research examining circumstances in childhood and in adulthood has shown the continued impact of childhood factors, such as father's social class, on later life health. However, current circumstances such as current socio-economic status, appear to have greater influence on health outcomes.
- The key triggers identified in the literature in terms of their impact on health at older ages are: age at retirement; loss of a job; and the experience of traumatic life events, including being in active service or experiencing evacuation during war time.
- There is a considerable body of research on the health effects of bereavement which shows that mortality and morbidity is higher for the bereaved compared with the non-bereaved, even when health and socio-economic group are controlled for, and that outcomes are worse for men than for women.
- Early age at retirement, experiencing a job loss, and traumatic life events (especially later in life) are all associated with poorer physical, and in some cases, mental health in mid and later life.
- More time spent unemployed is generally associated with poorer health, as is working life spent in low control jobs or in passive jobs. Life-long economic hardship is also associated with worse health outcomes in later life.

- People who have spent most of their adult life being married outlive those who have not. Past experience of widowhood and/or divorce has an adverse impact on the survival of men, but there is no demonstrable effect on women.
- With respect to childbearing histories, the literature generally shows more children, teenage childbearing and being unmarried at first birth to be associated with worse health outcomes in later adult life for women.

Life course factors and social support in later life

- Evidence is contradictory regarding the association between loss of a spouse and contact with friends. Some studies have shown that losing a spouse, through either death or divorce, reduces contact with friends whereas other studies report that widowhood increases social contact with others. In contrast, the onset of poor health is associated with increased receipt of support at older ages.
- Research has generally shown that marital disruptions over the life course, particularly divorce, have adverse consequences for support at older ages. However, recent work in the UK shows that older unmarried men and women are more likely to receive support from children in comparison to their married counterparts.

- There are few differences in support given and received by older people across ethnic groups in England and Wales.

Concluding points

- Few studies have looked at the impact of becoming a carer, migration, moving home or grandparenthood in relation to later life health and well-being.
- There is a need to tease out the relationship between work and marital histories, occupation, education, maternal status and other relevant factors, with income in later life.
- Understanding the impact of trigger events on health and well-being and patterns of social support are vital for effective policy development.





1. Introduction

1.1 Background

The Equality and Human Rights Commission (the Commission), is working in partnership with Age Concern and Help the Aged to deliver a programme of seminars and research called 'Just Ageing?'. The purpose of the programme is to investigate and develop understanding of the dynamics of inequality over the life course.

The health and well-being of the population is a major policy issue cutting across all UK government departments (for example, the Department of Health's Commissioning Framework for Health and Wellbeing; the Department for Work and Pensions' strategy document Opportunity Age, with its focus on active ageing; the Department for Environment, Food and Rural Affairs' promotion of active communities, part of its sustainable development strategy; the Welsh Assembly's initiative Health Challenge Wales; and the Scottish Government's Action Plan for Health and Wellbeing). The health and well-being of older people is likely to become an even greater policy concern given projected increases in the size of the older population. This year alone, for the first time ever, there are more people over state pension age than under 16 in the UK.

This report is a systematic review of the literature on the influence of life course factors (for example, trigger events) on later life financial, health and social

well-being. By 'trigger events' we mean the experience of life events such as losing a spouse; early or forced exit from paid work; becoming a carer; and onset of serious ill-health. As longer-term experiences are necessarily related, we will also examine the literature on the impact of family and work histories (for example, the proportion of working life spent unemployed) on later life health and well-being. Understanding the role that life events (that is more recent as well as long-term experiences) play in inequalities in later life is crucial for optimal policy reform: targeting those most at risk of disadvantage with appropriate interventions. Through the existing literature this research will aim to:

- 1) Identify the most frequently researched trigger events and which life events or experiences have received less attention.
- 2) Examine the impact of key trigger events on health and well-being in later life.
- 3) Investigate the influence of accumulated experiences on later life poverty and low income, health and social support.
- 4) Examine how individual characteristics (such as gender, ethnicity and disability status) influence the impact of trigger events and longer-term experiences on later life financial, health and social well-being.

In addition, this study will also take into account well-known predictors such as education and social class when investigating these aims.

1.2 Research focus

Research examining earlier life influences on later life outcomes has largely focused on the impact of circumstances at birth and in childhood (for example, low birth weight) on health (Barker 1992). Less research (although evidence in this area is increasing) has focused on the impact of life events throughout the life course on outcomes at older ages (in late as well as in mid-life). An initial exploration shows that this research generally takes two forms: studies which examine the influence of known variables in childhood and adulthood (such as social class) (Davey Smith et al. 1997) on later life outcomes, and those able to capture the impact of trigger events such as the loss of a spouse or retirement (McLaughlin and Jensen 2000).

In the UK the lack of research on the relationship between life events and later life outcomes reflects, in part, the scarcity of longitudinal and/or retrospective data for large nationally representative samples of older people. Because of this, much of the research on the impact of trigger events on health and well-being at older ages is North American (for example, McLaughlin and Jensen's 2000 study of the link between changes in marital and disability status and poverty among older Americans). However, in both North America and Europe little research has investigated one outcome in particular: social support.

In general, there is also a considerable lack of research on the influence of life histories (cumulative life experiences and not just measures of social-economic conditions at various time points) on health and well-being at older ages. In the UK, as in other industrialised countries, this is becoming increasingly important given well-documented changes in partnership and employment trajectories. For example, changes in marriage patterns show rising percentages of men and women who have ever experienced divorce, remarriage and cohabitation (Haskey 1993, Stevenson and Wolfers 2007). Such trends have led to greater family diversity among more recent cohorts of older people.

There have also been significant changes in labour force participation: more women are now in the workforce, working full-time, and returning to work sooner after childbirth (Rake et al. 2000). Among men there has been a strong trend toward earlier retirement, more periods of part-time work, self-employment and unemployment, and higher proportions who have held more jobs over their lifetimes (Taylor et al. 2000).

Once again, the relatively little research in this area is largely due to the lack of retrospective and longitudinal data for older people. The literature that does exist primarily focuses on the influence of life events on one outcome: health. For example, studies have investigated the impact of family (Grundy and Holt 2000, Grundy and Tomassini 2005); caregiving (Glaser et al. 2005); and employment histories on health (Bardasi and Francesconi

2004, Blane et al. 2001). The literature on the impact of life histories on poverty and financial well-being at older ages is once again largely North American (Holden and Kuo 1996, McLaughlin and Jensen 2000), although UK researchers are also beginning to investigate this issue (Bardasi and Jenkins 2002, Falkingham and Rake 2001).

Finally, few studies have looked at the influence of life histories on social support at older ages (Glaser et al. 2006a, Utz et al. 2002). Thus, the aim of this research will be to search the UK, North American and European literature for work examining the influence of life events and histories on health and well-being at older ages. In addition we will also examine reports and publications published by policy institutes, government departments, relevant charities and other non-academic policy or research organisations.

1.3 Outline of this report

This report highlights key research examining the influence of life course factors (for example trigger events and long-term experiences) on later life health and well-being (that is financial and social). Each of the chapters begins by looking at trends in inequalities in these well-being outcomes; examines each area of well-being from an equalities perspective (focusing on differences by gender and ethnicity), and then reviews the literature on the relationships between life course factors and each dimension of well-being.

Throughout the report the focus is on the most commonly identified trigger events found in the literature such as the onset of retirement (and its timing and whether

retirement was due to early or forced exit from the labour force), loss of a spouse (or bereavement), and onset of serious ill health.

In terms of life histories this review examines the influence of paid work (for example number of years in employment), parenthood (number and types of children and the timing of births), and partnership histories (including disruptions due to divorce, death and remarriage). It also considers the few studies that have examined the impact of caregiving on later life health and well-being (financial and social).

Chapter 2 presents the methodology for this review. Chapter 3 briefly discusses trends in pensioner income inequality as well as differences in late life financial circumstances by gender and ethnicity; before reviewing the literature on the most frequently studied trigger events (onset of retirement, loss of a spouse, and onset of disability), long-term experiences (paid work, partnership and parenthood) and their association with poverty and financial well-being in later life. Similarly, Chapter 4 briefly examines trends in health inequalities, the persistence of these inequalities at older ages; and discusses differences in health by gender and ethnicity in later life, going on to examine the most commonly studied trigger factors and their impact on health as well as the influence of cumulative life experiences. Chapter 5 briefly discusses inequalities in social support before reviewing the literature on life course influences on social support. Finally, Chapter 6 summarises the relevant literature and discusses which life events have received less attention.



2. Methodology

This report is based on a systematic search of the literature examining life course factors and events associated with three outcomes in old age: financial well-being (poverty and income), health (mortality and morbidity), and social support. We used several methods to identify studies. First, a four week search of key bibliographic databases was undertaken in April 2009. The search was primarily conducted using online academic databases (Web of Knowledge, PubMed, AgeLine, AgeInfo, and PopLine) and a publisher's website (The Policy Press).

Additional searches were also carried out for material using relevant government and charity websites for literature that may not have been captured through the methods discussed above. The government websites were the Department of Health (DoH), the Department for Work and Pensions (DWP), National Health Service (NHS) Evidence and The Stationery Office (TSO). Charity and think tank websites were those belonging to the Joseph Rowntree Foundation, Nuffield Foundation, Fawcett Society, King's Fund, and Equality and Human Rights Commission.

Most of these databases contain abstracts (and in many cases links to) research published in academic and professional journals, books, reports and government documents. The references were entered into Endnote version 10, a bibliographic database.

Second, lists of references at the end of articles found were also examined in order to locate related material not picked up in the database searches. Third, we compared references identified through all of these search methods with those already known to the research team. Finally, we identified highly cited articles on the topic of interest: lifecourse influences on later life outcomes (that is health, social support and financial well-being). Further details of our search techniques can be found in the endnotes.(1)

Inclusion criteria for search

The resulting publications were included if they predicted one of the three outcome factors, and the population of study was in middle or old age. The trigger factor had to be a behavioural factor directly linked to the outcome, such as the effect of number of children on social support at older ages. Only publications from 1985 onwards were included, and only those in the English language were considered.

Exclusion criteria for search

A study was excluded if:

- it predicted formal support or suicide
- stress was an outcome
- it dealt with the reaction to bereavement in old age
- it was a theoretical article, or
- the trigger factors it covered were not behavioural, for example, hormonal changes, or childhood intelligence.

After all of the online resources were searched, relevant publications extracted, and duplicates discarded, a library was created which contained 434 references (including those references already known to the authors and references relating to inequalities and trends in inequalities of the health and well-being outcomes considered). Of these 217 new papers and other materials located the majority of predicted health outcomes (177), fewer predicted poverty (31), and the fewest predicted social support (nine). In addition, a further 10 publications were identified by searching articles for papers cited by others. Four additional publications were identified for poverty (Burkhauser et al. 1991, Burkhauser et al. 1988, Coe 1988, Zick and Smith 1986) and six for health (Holland et al. 2000, Kuh et al. 2002b, Morris et al. 1994, Singh-Manoux et al. 2004, Warr and Jackson 1987, Warr et al. 1988).

Screening procedure

The 217 references found through the systematic literature review were ranked in priority order by relevance (the lead author read through all the abstracts and made a subjective judgement as to the study's relevance and priority for inclusion into the study). The references were graded into priority one (47 references, including 43 on health and four on poverty) and priority two (21 references). Most of the references that were not graded either priority one or two were those that focused on specific diseases, for example, the impact of familial factors on breast cancer (Andrieu et al. 2000). Summary notes were then created for each of the priority one and some of the priority two publications. This systematic review focused on the references most relevant to the issue of lifecourse influences on later life health and well-being (mostly priority one readings, the additional 10 publications identified through citations, and those already known to the authors).

3. Poverty and financial well-being

3.1 Trends in income inequality and poverty at older ages

Overall income inequality has not changed substantially since the advent of the Labour government in 1997 - it rose in the first few years, fell back, and has more recently grown again in the last three years. It is now at its highest level since records began in 1961, higher than during the Thatcher years (Institute for Fiscal Studies (IFS) 2009).

One of the most widely used measures of income inequality is called the before-housing costs (BHC) Gini coefficient. In this measure a value of 0 would mean perfect income equality in a country, and a value of 1 would mean all income in the country was earned by just one person. The Gini coefficient was 0.25 in 1979 when Margaret Thatcher came to power, rising to 0.35 in the early 1990s, and is now 0.36 (IFS 2009: 23-24).

The gap between pensioner and non-pensioner incomes has been closing in recent years and the incomes of poorer pensioners have maintained their position compared with the median income of non-pensioners; this means that pensioners have moved steadily up in the overall income distribution over time (although they are still less well off on average than the rest of the population) (DWP 2009a). In the 1990s, although older people continued to be over-represented at the bottom of the income distribution for the population as

a whole, this was combined with greater income growth among individuals of pension age than for the population as a whole (DWP 2009a). Pension incomes are less unequal than non-pensioner incomes and have remained so despite rising incomes among the richest pensioners (DWP 2009b, IFS 2002).

Pensioner poverty has fluctuated since Labour came to power in 1997 and has risen since 2006, but over the period 1997 to 2008 there have been substantial falls in pensioner poverty on the two most commonly reported measures - below 60 per cent of median equivalised income Before Housing Costs (BHC) and After Housing Costs (AHC).

In 1997, 29.1 per cent of pensioners were in poverty on an AHC measure compared with 25.3 per cent of the population, whereas in 2008, 18.1 per cent of pensioners were in poverty on this measure compared with 22.5 per cent of the population. On BHC measures the pattern is somewhat different, but still substantially improved for pensioners. In 1997 24.6 per cent of pensioners were in poverty compared with 19.4 per cent of the population, and in 2008 22.7 per cent of pensioners were in poverty on this measure, compared with 18.3 per cent of the population. (IFS, 2009: Tables 4.1 and 4.2).

Nevertheless, despite these recent falls in pensioner poverty,(2) the risk of poverty for an older person is almost 1.5 times higher than the typical risk of poverty for older people in Europe, and the fourth highest of the EU 25(3) (Zaidi 2006, Eurostat 2009).

3.2 Inequalities in poverty and financial well-being in later life

Cross-sectional studies have shown that poverty in old age is consistently associated with gender, ethnicity, marital status and lower educational levels (Ginn 2003a, McLaughlin and Jensen 1993). Similarly, research has found that transitions into poverty in later life is also higher for women, certain minority groups (such as blacks in the United States), and those with lower educational achievements (Holden et al. 1988).

Gender. With respect to gender, in the UK, 60 per cent of those over state pension age are women. This, together with their greater poverty when living alone, means that almost 1.3 million female pensioners live below the poverty line compared with about 750,000 male pensioners. In the UK, in 2003, 64 per cent of those receiving the Pension Credit Guarantee - the basic means-tested benefit for pensioners - were women, and women are also less likely than men to claim the benefits to which they are entitled (DWP 2000/2001, Office for National Statistics (ONS) 2003). In November 2008, there were approximately 1.8 million women benefiting from Pension Credit (Guarantee and Savings Credit),

compared with approximately 1.5 million men.(4) Among those over age 75, women outnumber men by just less than two to one, but among single pensioners in this age group, poor women outnumber poor men by almost four to one (Price 2006b).

There are two principal reasons for this gender disparity: first, the UK pension system tends to perpetuate the relatively disadvantaged position of women in the labour force, and second, women have historically provided the bulk of caring work in the UK. This reduces their ability to accrue both state and private pensions since they do not always qualify for, or claim, national insurance credits. Culturally, it is accepted that women generally work part-time while assuming traditional gender roles of caring and housework (Price 2006a). In a government report on women and pensions (DWP 2005), the authors concluded that partnered men received about twice as much income in later life from the state as partnered women, and had far more private pension and other income. Gender differentials for women and men without partners were also substantial (DWP 2005: 25-6).

With recent pension reforms, future cohorts of retiring women are expected by the government to accumulate far more state pension in their own right than previously, with 90 per cent of both men and women reaching state pension age in 2020 having a full basic state pension (DWP 2007). However, currently almost three in ten women between 16 and state pension age are not in the paid

labour market, and of those in the paid labour market, about 40 per cent work part time (DWP 2005).

Differential accumulation of state second pension and private and occupational pensions will continue to depend on gender disadvantages in work and care over the working life (Arber and Ginn 2004, Bellamy and Rake 2005, DWP 2005, Evandrou and Glaser 2003, Falkingham and Rake 2001, Ginn 2003b, Harris 2006, Rake et al. 2000, Warren 2003). This is so despite substantial improvements in pension credits for carers (including now grandparents), because many of these credits will depend on individuals making an active claim, and there are likely to be very substantial proportions of those entitled who do not claim.

Ethnicity. Less research has examined ethnic group differences in late-life financial circumstances. A recent report commissioned by the Commission found that people from ethnic minority groups are more likely to end up with lower pension incomes in later life (in comparison to Whites) as they generally spend less time in work and are, therefore, less likely to qualify for state pensions. Furthermore, they usually earn less even when in full-time work, and they are less likely to save for a pension (Steventon and Sanchez 2008).

3.3 Trigger events

Cross-sectional studies can only tell us about the association between selected characteristics and poverty or low income

at one point in time; such studies are not able to investigate the trigger events that lead to poverty or the impact of other life course influences. Using longitudinal data, the most commonly studied life events (or transitions) in terms of their relationship to poverty (and/or low income) in old age have been the onset of retirement (Bardasi et al. 2002, Burkhauser and Duncan 1991, Holden et al. 1988), loss of a spouse (either through death or divorce) (Burkhauser et al. 1988, Burkhauser et al. 1991, Burkhauser and Duncan 1991, Emmerson and Muriel 2008, Holden et al. 1986, Holden et al. 1988, McLaughlin and Jensen 2000, Zick and Smith 1986), and the onset of disability (Burkhauser and Duncan 1991).

Retirement, and its timing, has been shown to be a key life event or 'trigger' leading to a substantial drop in economic well-being (Bardasi and Jenkins 2002, Burkhauser and Duncan 1991, Burkhauser et al. 1988, Coe 1988, Holden et al. 1988). Despite social protection programmes in most western and industrialised countries which seek to look after individuals who are no longer able to work, retirement is still associated with risks to economic well-being. For example, a study conducted in the early 1990s based on the US Panel Study of Income Dynamics (PSID) (one of the longest running panel surveys) showed that nearly 5 per cent of retirees suffered dramatic drops in their living standard following retirement and a third experienced a drop of around 30 per cent (Burkhauser and Duncan 1991). Retirement also has long-term

consequences for late-life financial well-being. In the same study, only 30 per cent of retiring couples returned to their pre-retirement income levels after 5 years (Burkhauser and Duncan 1991).

Fewer studies have looked at the relationship between the timing of retirement and late-life financial well-being. This is important as, until recently, there was a trend toward retirement at earlier ages especially among men. The shift away from work among older men is said to reflect a mixture of voluntary and involuntary decisions (Bardasi and Jenkins 2002).

Bardasi et al. (2002) investigated the probability of low incomes following retirement using the first nine waves of the BHPS (1991-1999). The study found the transition from full-time work to retirement to be associated with a large increase in the probability of becoming poor for both men and women (self-employment among men was associated with the largest probability of becoming poor). They also investigated whether those who retired early were less likely to become poor (the assumption being that this would most likely be due to the receipt of an occupational pension among this group). However, the study found no association between early retirement and low incomes once other factors (such as education) were taken into account. The authors were not able to distinguish between voluntary and involuntary retirement

The other trigger factors that have received considerable attention in the literature on poverty and income in later life have been the loss of a spouse and the onset of disability. Several studies have shown that losing a spouse has a significant association with later life poverty and changes in poverty at older ages (Burkhauser et al. 1988, Burkhauser et al. 1991, Burkhauser and Duncan 1991, Emmerson and Muriel 2008, Holden et al. 1986, Holden et al. 1988, McLaughlin and Jensen 2000, Zick and Smith 1986).

For example, McLaughlin and Jensen's (2000) study showed that being newly widowed was associated with higher poverty risks for those aged 55 and over even when work history variables (including years in full-time work since the age of 18) and current socio-economic circumstances were taken into account.

Fewer studies have examined the association between the onset of disability and later life economic circumstances. Burkhauser and Duncan's (1991) study using the US PSID found that the onset of work related disability reduced economic well-being at older ages; however, this effect was lessened to some extent by social protection measures designed to safeguard workers against health related events (Burkhauser and Duncan 1991).

3.4 Work histories

Work history is thought to matter for income at older ages because entitlements to state, occupational and personal pensions

are built up during this period along with other financial assets (Bardasi and Jenkins 2002). The complex UK pension system encompasses state provision, occupational provision and private provision, with all elements playing a part in the avoidance of poverty in later life (Pensions Commission 2005). Accrual of state provision in the form of a basic state pension and additional state pension is dependent on national insurance contributions paid from earnings, or national insurance credits, made during working life.

However, the relationships between work histories, state and private pension accumulation, and national insurance contributions are complex (Pensions Commission 2004, 2005). For example, not all those in paid work pay, or are credited with, national insurance contributions (if their pay is too low, for example), and many of those not in paid work receive credits to national insurance, for example if they are in receipt of child benefit, or unemployment or disability benefits, or care for a severely disabled person. The system of national insurance credits is, therefore, generally redistributive from those in paid work to those who are not, but many people have gaps in their national insurance records because they were not earning enough to pay contributions but also did not qualify for or claim credits.

While almost all people accrue state pensions, the value accrued is relatively low. In November 2006, the average amount of all state pensions combined

paid to pensioners was just £87 per week⁽⁵⁾ when the poverty line was £145 a week.⁽⁶⁾ Many pensioners therefore need occupational or private pensions for adequate income in later life. Non-state pension income accounts for most of the observed financial inequality among older people (Pensions Commission 2005).

In addition, research has highlighted the importance of considering the nature of work undertaken (that is, occupation and type of job held) and not just the number of years spent in employment, as pension entitlements will clearly be affected by both levels of earnings and the likelihood of being offered membership of a pension scheme.

The reliance on a contribution based national insurance system and on private and occupational pension for adequate income means that those who are disadvantaged in the workplace - either because they are not in paid work, or because of low pay or poor terms and conditions - have high risks of poverty in later life (Evandrou and Glaser 2003, Arber et al. 2003). This means that it is not clear to what extent pension disadvantage in later life is the result of work histories, gaps in national insurance contributions or credits, or to what extent it is a result of terms and conditions at work. Therefore, a key focus of this review is on the contribution of work histories and work events, the percentage of working life spent in paid work and early and/or forced exit from the labour force, to poverty in later life.

Despite the acknowledged importance of empirical research about the connections between lifetime work histories and later life income in a pension system that relies heavily on private provision, very little research exists. This is predominantly because of a lack of longitudinal data (Bardasi and Jenkins 2002).

While much is known about the current income and asset position of pensioners and how these have changed over time, there is much less evidence about the life course events of those people who live on relatively low incomes in retirement and how these differ from the life experiences of better off pensioners. Such research as has been done suggests that work histories may have less impact on having low income in later life than has generally been assumed (Bardasi and Jenkins 2002). It is important to develop this line of research in order to understand better why some pensioners end up poor and what may drive future changes in pensioner incomes.

In order to relate poverty in old age to work histories, longitudinal data about income and past work experiences are required. To our knowledge, in the UK four data sources have collected work histories for men and women: the 1994/5 Family and Working Lives Survey (FWLS), the longitudinal Retirement Survey (RS) 1988/89 and 1994, the British Household Panel Survey (BHPS) and English Longitudinal Study of Ageing (ELSA). (7)

ELSA covers England whereas the FWLS, RS, and BHPS all cover Britain (that is, include Scotland and Wales). The FWLS was a one-off survey based on a nationally representative sample of 9,139 individuals aged between 16 and 69 years in Britain, interviewed in 1994/5 (Koskinen et al. 2007). A report based on the FWLS investigated age and gender differences in non-state pensions (Walker et al. 2000). However, this survey has not been used to examine financial outcomes for older people, most likely because the sample was restricted to those aged 16-69; and as previously mentioned, the Retirement surveys have largely been used to explore the link between earlier employment histories and gender inequalities in later life income (Arber et al.). Thus, most of the work reported here focuses on research based on the BHPS with more recent analyses using ELSA.

Work histories are often conceptualised in terms of three aspects: the total amount of the person's life spent in and out of work (often from around the age of 20 to state retirement age); type of occupation held and earnings; and the continuity of an individual's labour force participation (often measured by early exit from the labour market) (Bardasi and Jenkins 2002).

Bardasi and Jenkins (2002) carried out a study using the first nine waves of the BHPS (1991-1999) including retrospective information on lifetime work histories. The research confirmed that women are much more likely than men to have low

incomes over the age of 60 and that this was related to shorter employment lives, higher occupational instability and more part-time work. However, multivariate analysis concluded that simply spending more years in paid work between the ages of 20 and 60 did not necessarily lower the risk of having a low income for people aged 60 and over.

For women, low income at older ages depended particularly on their age, living arrangements (partnered or not partnered, and marital history), having higher level educational qualifications, and their occupation when working.

For men, age, education, marital status and living arrangements were also important, as were occupation, period spent unemployed, and for some occupations, early exit from the labour force, but apart from that, proportion of working life spent in employment mattered only in some (limited) occupations.

The results are somewhat surprising. It is generally understood in policy circles that proportion of working life spent in paid work is particularly important in determining later life income, but the researchers found that in a number of occupational sectors - principally low paid sectors for women - work history was not a statistically significant explanatory variable.

This study was exploratory and raised a number of challenging questions for our understanding of the relationship

between work histories and poverty in old age. Stewart (2003) also used the BHPS to study the importance of work history for pensioner income and wealth. He used the BHPS work histories to construct imputed lifetime earnings histories, and examined the relationship between lifetime earnings and pensioner income/wealth. He found that for single male and couple pensioners, lifetime earnings were strongly related to pensioner income/wealth - they were proportional to each other (elasticity of 1, meaning that a 1 per cent increase in lifetime earnings led to a 1 per cent increase in pensioner income/wealth).

But for single female pensioners, lifetime earnings had far less impact on pension income/wealth (a far lower estimated elasticity of 0.3, meaning that a 1 per cent increase in lifetime earnings led to only a 0.3 per cent increase in pensioner income/wealth). This means that women's lifetime earnings have some, but far less, impact on their income/wealth in retirement than men's.

For both men and women he further concluded that pensioner incomes are not influenced by the proportion of their working lives over which they were employed once lifetime earnings are controlled. An American study (McNamara, 2007) similarly found that proportion of time spent in paid work in mid-life had little effect on the economic well-being in later life of low earning women, once other job characteristics were controlled for.

There is, therefore, a small body of emerging evidence to suggest that the proportion of working life spent in paid work may not be significant in determining low income in later life once other factors, such as occupation and education, are taken into account.

These two studies raise important questions, particularly since the results seem contrary to currently accepted wisdom. It may be that those women who earn relatively more than other women simply don't earn enough, in an absolute sense, to make contributions to pensions; or that even when they earn more, their terms and conditions include poor pension provision; or that they do not accumulate pensions for cultural reasons; or in the (perhaps rational) expectation that they will be entitled to state benefits in retirement and so would be no better off if they sacrificed current consumption for pension saving. How these factors are related to the education, occupation, marital and maternal status of women are important policy questions.

3.5 Family histories

It is well-established in the literature that being unmarried has a strong association with low income in later life, especially among women. Being never-married, widowed, or divorced/separated has consistently been found to be strongly associated with adverse economic well-being at older ages for both sexes (Bardasi and Jenkins 2002, McLaughlin and Jensen 2000).

However, most studies have considered marital status only at one point in time; little research has investigated the relationship between family histories (partnership and parenthood) during the life course and later life financial outcomes. Investigating the impact of family histories on income at older ages is important given:

- (i) that family histories are closely tied to paid work histories (that is women's traditional caring responsibilities within marriage and motherhood generally result in greater variation in their own work histories in comparison to men's), and
- (ii) changes in family behaviour, with an increase in childbearing outside marriage, later childbearing, and in the likelihood of partnership dissolution.

The pension system in the UK (and in other industrialised countries such as the US) was designed assuming that women would be largely dependent on their husbands' income for their pension in retirement. Thus the basic state pension was designed to provide a basic income for married couples based on the husband's contributions.

However, the UK, like other developed countries, has witnessed significant changes in family behaviour in recent decades. Among the well-documented trends are declines in marriage and childbearing and rises in divorce and cohabitation (Haskey 1993, Schoen et al. 1985). Such changes, despite recent

provision for pension sharing following divorce, may place women in an even more disadvantaged position in terms of later life income. Thus, in addition to paid work histories, it is also critical to investigate the association between work and family histories for men and women's financial well-being at older ages.

Once again, using the BHPS, Bardasi and Jenkins (2004) found no association between lifetime marital status indicators and the receipt of private pension income in later life, that is, marital history over the lifecourse appeared to make no difference to private pension income in later life once other factors including work histories were controlled for. They concluded that work histories may be more important than family histories for later life financial well-being. Given the research outlined in Section 3.4 above, however, clearly more research is needed to clarify what drives low income in later life, particularly for women.

Also in apparent contrast to Bardasi's and Jenkin's (2004) study, previous work by Rake et al. (2000), based on simulation models using hypothetical individuals, had shown lower retirement incomes among women who had children, and that women who divorced and did not remarry were the worst affected in financial terms. This was supported by Ginn (2003b) and colleagues' work based on the General Household Surveys, which showed a significant loss of pension entitlements among women who had children and those who experienced divorce.

Research using the FWLS also showed that women who were out of the labour force for longer periods, who had children earlier, and who had more children were at higher risk of not having a non-state pension: once again putting them at greater risk for poverty in old age (Walker et al. 2000).

This research so far presents a very confusing picture. On the one hand there is evidence to suggest that time spent in paid work over the lifecourse is not that important, and nor is marital history, in explaining women's low income in later life. On the other, studies have shown that histories of divorce and motherhood are critical, although the mechanisms by which they lead to low income in later life are not always clear. An assumption is that they lead to discontinuous or chequered work histories, but this then needs to be reconciled with the studies showing that work histories matter less than one might initially think.

In a more recent study based on the BHPS addressing these issues, Sefton and colleagues (2008) examined the impact of work and family histories (including the duration and timing of various events) on individual incomes (not household incomes) of women aged 65 and older. Although number of years spent in full-time work had a significant effect on later life income, the association between later life income and the family history indicators was weak. For example, older women who remarried, divorced or who became widowed reported similar

individual incomes to those who remained continuously married (Sefton et al. 2008). Having children was found to be associated with lower individual incomes in later life but the actual number of children appeared to make little difference (Sefton et al. 2008).

In addition, while the timing of children did not affect women's later life income the timing of marriage did: women who married later had higher incomes at older ages (Sefton et al. 2008). However, even Sefton et al's (2008) study did not look at the effect of work and family histories together on later life incomes, choosing to study each type of history separately.

Finally, Johnson and Favreault (2004) examined the long-term impact of single motherhood on the financial situation of older women using the US Health and Retirement Survey. The study concluded that women who spent over ten years raising dependent children outside of marriage were 55 per cent more likely to live in poverty between ages 65 to 75 in comparison to women who were continuously married while raising young children, even when factors like their current educational level and marital status were controlled for (Johnson and Favreault 2004).

In summary, for women, number of children appears to have an effect on late-life income as does spending 10 years or more raising young children on their own; the evidence for the impact of marital histories however is less clear. While many studies have found

an association between current marital status and low incomes at older ages, most have not found an association between women's marital histories and their incomes in later life.

3.6 Summary

- Income inequality has not changed substantially since the advent of the Labour government in 1997; nevertheless income inequality is higher now compared to the late 1970s.
- Pensioner poverty has fallen between 1997 and 2008, despite fluctuations. Pensioner inequalities are less than they would otherwise be partly because of improvements to the pension credit.
- Women and people from ethnic minority groups are more likely to have low incomes and be poor at older ages.
- Onset of retirement, loss of a spouse and onset of disability are the three most commonly studied life events affecting later life poverty and low income. The literature shows all of these trigger events to be associated with lower incomes and poverty at older ages. Education, social class and disability continue to be important predictors of later-life poverty.

- The evidence on the impact of work and marital histories on low income in later life is mixed. Contrary to what was expected, some studies suggest that the proportion of life spent in paid work may not be important in determining low income at older ages once other factors such as occupation and education

are taken into account. Others show that women who are out of the labour force for longer periods and had children, and those who were divorced and did not remarry were at greater risk of poverty in older age.

- Spending time raising young children as a single parent is associated with increased poverty in later life.





4. Health

This chapter provides an overview of the literature on the association between trigger events and life course factors on later life health (mortality and morbidity). The chapter begins with a brief overview of trends in health inequality focusing on inequalities at older ages and explores differences in health by gender and ethnicity.

4.1 Trends in health inequality at older ages

There is a long-standing tradition of research on health inequalities in the UK. This work has focused on documenting widening inequalities in recent decades (despite improvements in living standards and mortality) as well as on understanding the underlying mechanisms linking socio-economic status and health (Graham 2000, 2002, ONS 2008, Marmot and Wilkinson 1999).

Most of the work on trends in health inequalities has focused on occupation related measures of inequality such as social class, to examine changes over time. Much has also focused on inequalities in childhood and in adult working life; less research has investigated health inequalities at older ages, even though health problems are more prevalent at these ages (Berney et al. 2000).

A key debate in the literature has been on whether socio-economic differences in mortality and health found at younger

ages persist in later life (Goldblatt 1990, Jagger and Clarke 1988). A difficulty in studying this issue has been determining indicators of socio-economic status appropriate for the older population. Measures of socio-economic status are often occupation based making them only relevant for those of working age (see Grundy and Holt 2001, Grundy and Sloggett 2003 for a critical discussion of measures of SES for the older population).

Marmot and Shipley's study (1996) based on the Whitehall study (a prospective study which followed up men over a 25 year period who were 40-69 at entry into the study) found social inequalities in mortality to persist at older ages (Marmot and Shipley 1996). They found both work and non-work measures of socio-economic status (using employment grade and car ownership) to be associated with mortality in later life (Marmot and Shipley 1996).

Martelin et al.'s (1998) study based on Finnish population registers also found socio-economic differentials in mortality at advanced ages, although the gap was smaller at older than at younger ages (Martelin et al. 1998). Similarly, research using the ONS Longitudinal Study, based on linked census data, showed socio-economic differentials in life expectancy in England and Wales to persist at older ages; moreover, as at younger ages, this gap has also widened over time. For example, the difference

in life expectancy at age 65 between men in Social Class I and V was 2.4 years in 1972-76 versus 4.2 years in 2002-2005 (ONS 2008). Studies which have examined morbidity (for example, limiting long-standing illness) rather than mortality have also found social differentials in health to continue at older ages (Breeze et al. 2001, Meltzer et al. 2001).

The continuation of health inequalities, even at older ages, has led researchers to focus on a life course perspective (Graham 2000, 2002). Earlier work on health inequalities largely examined the association between socio-economic circumstances at one point in time and health rather than investigating the influence of factors across the life course. The life course approach examines how experiences over one's lifetime leads to adverse health outcomes in later life rather than just focusing on the association between circumstances at one point in adulthood and health (Graham 2000, 2002).

Health research on the influence of earlier life circumstances on later life outcomes has largely examined the influence of known variables in childhood and adulthood, such as social class, on mortality and morbidity in mid and later life. These studies have largely shown that childhood socio-economic circumstances, even when circumstances in adulthood are also taken into account, continue to have an important impact on mortality (Davey Smith 1997, Guralnik et al. 2006, Hayward and Gorman 2004, Kuh

et al. 2002a, Lawlor et al. 2005, Marmot et al. 2001, Singh-Manoux et al. 2005, Singh-Manoux et al. 2004).

For example, Davey Smith and colleagues' (1997) seminal work based on the prospective West of Scotland Collaborative study(8) found mortality to be related to cumulative socio-economic circumstances (a summary measure based on father's social class, social class of first job and social class at time of interview) in addition to measures of socio-economic position in adulthood (Davey Smith et al. 1997).

Research using the 1946 National Birth Cohort also showed childhood socio-economic conditions (using measures other than father's social class, such as parental education, housing quality and care in childhood) to have a significant effect on mortality among mid-life men and women at age 55, even when measures of socio-economic position in young adulthood, in particular lack of homeownership at age 26, were included (Kuh et al. 2002a). Similar results on the relationship between social conditions in childhood (such as family living arrangements) and in adulthood (longest held occupation and variations in family income over time) and mortality have been found for older men in the US This was based on a prospective study using a nationally representative sample of older men aged 45-59 first interviewed in 1966 (Hayward and Gorman 2004).

In addition to the continued influence of childhood circumstances (for example,

as captured by father's social class) and conditions in adulthood (such as occupation) on mortality, studies have also shown the adverse impact of these circumstances on measures of psychological health and physical functioning in mid and later life (Alvarado et al. 2008, Guralnik et al. 2006, Hallqvist et al. 2004, Lawlor et al. 2005, Luo and Waite 2005, Marmot et al. 2001, Moody-Ayers et al. 2007, Nguyen et al. 2008, Nicholson et al. 2005, Singh-Manoux et al. 2005).

For example, Marmot and colleagues (2001) using the Whitehall II cohort study comprising both men and women aged 35-55 working in government departments in 1985-1988, found health (depression and chronic bronchitis) to be related to participants' father's social class as well as to current and initial grade at entry to the civil service (Marmot et al. 2001). However, when all three explanatory factors were considered, the strongest association was found between participants' current employment grade and the three health measures studied: coronary heart disease, chronic bronchitis and depression (Marmot et al. 2001).

More recently, research has turned towards investigating trigger events and experiences accumulated across the life course (rather than at selected time points), as well as conditions in old age. This chapter will focus on the increasing body of research investigating the link between life course factors, that is life events and cumulative experiences, and

later life health. Before proceeding to examine studies that have looked at life events and cumulative life experiences and health, we will briefly discuss the other equality strands (for example, gender and ethnicity) given the wide body of evidence that has found these factors to have a critical influence on health at all ages.

4.2 Inequalities in health in later life

As at younger ages, health inequalities at older ages continue to be affected by other existing inequalities such as gender and ethnicity. There is a vast literature looking at these areas of inequalities and, therefore, this section provides only a summary of the key literature.

Gender. Baring a few exceptions, life expectancy around the world is higher for women than for men (Kinsella and He 2009). In developed countries the mean difference in life expectancy is about 7 years between men and women (Gjonça et al. 2005). The gender gap in the UK is relatively small compared to that found in other developed countries. For example, the UK has a gender gap in life expectancy at birth of about 5 years compared to 7 years in France and 13 years in Russia. With improvements in mortality, that is since the turn of the 20th century, the gender gap in life expectancy has widened; however, recently, for some countries including the UK, the gap has narrowed, largely due to greater improvements in male rather than female mortality. Thus, in contrast to widening health inequalities discussed

above, gender differences in mortality have begun to improve for some countries including the UK. This improvement in the gender gap in life expectancy is also apparent at ages 65 and above (Gjonça et al. 2005).

There is a wide body of evidence examining both biological and social explanations for gender differences in mortality (Waldron 1986; Oksuzyan et al. 2008). Research suggests that women do have a biological advantage in survival but that this is probably no more than a two year advantage (Luy 2003). Therefore, although biological factors play an important role, most of the gender difference in survival is likely to be due to other factors.

Thus, research has focused on social factors to explain women's mortality advantage (Gjonça et al. 2005, Waldron 1986). For example, studies have looked at gender differences in employment (men are more likely to be employed in more dangerous occupations and to report higher levels of job related stress), in attitudes to health (for example, women have healthier diets and are more likely to go to the doctor) and in risky behaviours (men are more likely to smoke and drink) (Gjonça et al. 2005, Waldron 1986; Oksuzyan et al. 2008).

Smoking has been found to be a key influence on gender differences in later life mortality. Gjonça and colleagues (2005) found that the adoption of risky behaviour patterns, such as smoking,

explains a large part of the gender gap in life expectancy across countries. Countries like the UK, where smoking was adopted earlier and where there have now been significant reductions, tend to have smaller sex differences in mortality in comparison to countries where people took up smoking later, such as in France. In the UK among men there has been a decline in the death rate for cancers of the respiratory system, whereas in France where the effect of the smoking epidemic is still high, deaths from these types of cancers have increased leading to a larger gender gap in mortality.

Nevertheless, while women live longer they spend more years in poor health (Arber and Ginn 2004; Oksuzyan et al. 2008). Numerous studies have shown that women are more likely to report poor health than men (Kinsella and He 2009).

Ethnicity. In addition, numerous studies (although largely from the US) have examined health differences (mortality and morbidity) by ethnicity. A seminal study by McCord and Freeman (1990) showed significant excess mortality for black people compared to white people, and also found that black men in Harlem were less likely to survive to age 65 than their counterparts in Bangladesh.

Although black-white differentials have narrowed over time in the US, levels of life expectancy among blacks in the 1990s were similar to those achieved by whites in the 1950s (Markides and Keith 1995). In the US, where ethnic group

differences in health have received the greatest attention, blacks show higher mortality than whites up to about age 80 when the pattern reverses. Thus US data shows a mortality crossover at the oldest ages: life expectancy at birth is higher among whites than blacks but life expectancy around age 80 and above is higher among blacks than whites (Markides and Keith 1995). However, some researchers have suggested that better survival at older ages of black people may reflect inaccuracies in age at death on death certificates (Elo and Preston 1994).

The debate about what causes this mortality crossover is relevant to broader issues about the impact of early life disadvantage on later life outcomes: whether disadvantage early in life means greater advantage in later life due to selective survival (that is, survival of the fittest) or whether disadvantages carried throughout life are compounded at later ages (Grundy 1997).

A mortality crossover after age 65 was also found in a British study which compared death rates between South Asian and European people with diabetes. Mortality rates for those aged between 30 and 54 was 50 per cent higher for South Asians compared to Europeans; however, among those aged 65 to 74 the mortality ratio was 0.90; and finally for those aged 75 and over it was 0.53 among South Asians, significantly lower than the European group (Mather et al. 1998).

More recent work has shown that, similar to women who live longer lives but spend a greater proportion of their lives in poor health relative to men, people from ethnic minority groups also have higher life expectancies at older ages relative to whites but with few exceptions (for example, Asian Americans) spend a greater period of their life in poor health (Hayward and Heron 1999).

More recent evidence shows that those in lower status groups are more likely to experience an expansion of morbidity (Crimmins and Saito 2001). For example, a study found persistent disparities in difficulties with activities of daily living among black and white older people, and this difference did not narrow or reverse over a six-year follow-up period, even when socio-economic status, social networks, and depression were accounted for (Kelley-Moore and Ferraro 2004).

In the UK, information on the mortality and morbidity of older people from ethnic minority groups is sparse (whether for England, Wales or Scotland). For example, information on ethnicity is not collected on death certificates making it difficult to examine ethnic group differences in mortality, especially at older ages as the numbers of older people from ethnic minority groups is small. Research using the ONS Longitudinal Study (which covers England and Wales) examined differences in mortality among migrants using country of birth as a proxy for ethnic group among those aged 20-64 (Harding and Maxwell 1997). The authors found that even when

social class was taken into account, foreign-born populations generally showed higher mortality than the host population.

Studies have used census data to examine ethnic group differences in health in Britain, although most studies do not specifically focus on older people from ethnic minority groups. A study based on UK census data found that Pakistani and Bangladeshi groups reported the highest rates of a limiting long-term illness or disability (ONS 2004). Similarly, the Fourth National Survey of Ethnic Minorities (covering England and Wales) found Pakistani and Bangladeshi groups to have a significantly higher risk of some types of illnesses, such as heart disease/severe chest pain and diabetes, when compared to the white group. The Caribbean group, specifically women, had a significantly higher risk of hypertension and diabetes when compared to the white group. Indian and African Asian groups had a significantly lower risk of hypertension, and a significantly higher risk of diabetes when compared to the white group (Nazroo 1997).

The EMPIRIC study of ethnicity and mental health drew on a sample from the Health Survey for England 1999 (Weich et al. 2004). The results showed that common mental disorders such as depression and anxiety disorders, but not schizophrenia, were higher among Irish and Pakistani men aged 35-54 compared to white men of the same age. It also found that Indian and Pakistani women

aged 55-74 had a higher rate of common mental disorders when compared to white women of the same age group. Bangladeshi women had lower rates of common mental disorders than white women, and there were no differences between the Black Caribbean and white groups. However, there is a well-established higher rate of schizophrenia among the Black Caribbean community in the UK (Pinto et al. 2008).

It should be noted that little work on either mortality, physical or mental health has examined ethnic group differences at older ages in the UK

4.3 Trigger events

There are fewer studies based on either prospective or retrospective data which include detailed information on life histories for relatively large samples of older adults. For this reason, there is less research on the relationship between trigger factors and health in later life in comparison to that which considers social conditions at key time points in childhood and adulthood. The key life events or triggers that were identified in the literature in terms of their impact on health were age at retirement, the loss of a job, and the experience of traumatic events earlier in life, including being in active service or the experience of being evacuated.

There is also a considerable body of related research on the health effects of bereavement. Spousal loss, or bereavement, is a widely studied life-

course event. Before proceeding with a review of the trigger events discussed above, this chapter first considers the literature investigating the link between losing a spouse and health (mortality and morbidity).

A considerable literature has investigated the effects of bereavement; however, most of this work has focused on mortality. Longitudinal studies comparing the bereaved with the non-bereaved have shown that:

- (i) mortality and morbidity is higher among the former group even when confounders like baseline health and socio-economic status are controlled for (Bowling 1987, Helsing and Szklo 1981, Stroebe et al. 2007)
- (ii) excess mortality risk among the bereaved usually occurs during the first 6-12 months following the death of a spouse (Bowling 1987, Helsing and Szklo 1981, Mendes de Leon et al. 1993)
- (iii) outcomes are worse for men than for women (Bowling 1994, Christakis and Allison 2006, Stroebe et al. 2001)
- (iv) relative mortality from heart disease and lung cancer, accidental and violent deaths is higher among the bereaved, including excess mortality from suicide and alcohol related deaths (Martikainen et al. 2005), and
- (v) the relative mortality risk for the bereaved is greater at younger than at older ages (Koskinen et al. 2007, Schaefer et al. 1995).

Fewer studies have focused on the effect of widowhood on the risk of mortality

at very old ages (Bowling 1994, Helsing and Szklo 1981, Jagger and Sutton 1991, Mendes de Leon et al. 1993) and some did not find higher mortality risks after bereavement (Helsing and Szklo 1981, Jagger and Sutton 1991, Mendes de Leon et al. 1993). It is hypothesized that the death of an elderly spouse may have less of an impact, as it is less likely to be unexpected (Shye et al. 1995). Nevertheless, the effects may still be profound and have consequences for other less studied measures of well-being. For example, older people may, due to death and poor mobility, have smaller support networks with which to cushion the loss.

Most studies which show bereaved people to have poorer physical and psychological health outcomes are based on cross-sectional data (Carr and Utz 2001-2, Stroebe et al. 2001). Fewer studies have been able to take psychological or physical health status prior to bereavement into account (Stroebe et al. 2001, Wade and Pevalin 2004). Studies based on longitudinal data able to control for prior physical health status show worse outcomes for physical health and health behaviours, such as higher levels of perceived poor health and self-reported medication use, among bereaved spouses compared to the non-bereaved (Fenwick and Barresi 1981, Wyke and Ford 1992).

Similarly, studies report worse psychological health among those experiencing bereavement in comparison to their non-bereaved counterparts even

when prior psychological health is taken into account (Wade and Pevalin 2004). The evidence on gender differences is less clear: some studies show no gender differences in the prevalence of symptoms of depression following spousal loss (Iachina et al. 2006) while in others, widows report higher levels of depression following bereavement than widowers (Marks and Lambert 1998).

Finally, there has been some investigation of the impact of losing a spouse on health behaviours such as smoking, drinking, and diet (Shahar et al. 2001, Williams 2004). For example, widowhood was found to be associated with increased alcohol consumption, the eating of more meals away from home, decreases in physical exercise and vegetable intake, weight loss, and fewer reminders to do things to protect one's health, assist with medication use, special diets or health care treatments (Shahar et al. 2001, Williams 2004). However, little research has examined hospital admissions or discharge following bereavement or medication use.

In contrast to the extensive body of evidence examining the impact of bereavement on health, much less research has focused on the impact of other key life events such as that of retirement and its timing. For example, research on the health effects of retirement and age at retirement is limited (Bamia et al. 2008, Morris et al. 1994).

The few studies that have looked at the impact of retirement and that were able

to take into account some measure of previous medical or health conditions likely to lead to early retirement, showed it to be associated with higher mortality. However, there are likely to be two types of early retirees: those who retire early due to poor health and those able to retire early due to private savings, investments or occupational pensions and who are by and large in good health.

A recent study using prospective data from a German health insurance fund found higher mortality among those who received a reduced earnings capacity pension, given to those with physical and mental incapacities, and who retired early between the ages of 51 and 55 (Brockman et al. 2009). Moreover, their study showed that healthy people who retired early did not experience higher mortality (Brockman et al. 2009).

In addition, few studies have investigated a related area, the effect of job losses on the health of older workers (Gallo et al. 2000, Warr and Jackson 1987, Warr et al. 1988). Warr and colleagues (1987) examined 954 men in Britain aged 16 to 64 years who had been unemployed for a significant period of time: 25 months. They found both older and younger unemployed workers to report better mental health in comparison to those in the medium age group (those aged 25-59) (Warr and Jackson 1987). Reasons for this difference may be that older workers may experience fewer stressors in relation to being unemployed in comparison to middle aged workers, who are more likely to have greater family and financial

responsibilities (Warr et al. 1988). However, these studies did not compare the employed to the unemployed so it was not possible to determine the effects of the job loss per se.

Gallo and colleagues (2000), using the longitudinal US Health and Retirement Survey, were able to compare older unemployed with employed workers and found that older workers who experienced involuntary job loss reported poorer physical and mental health, even when baseline health and socio-demographic factors were taken into account (Gallo et al. 2000).

In terms of other triggers, researchers have investigated the impact of traumatic life events, either in childhood or adulthood, on mid or later life psychological and physical well-being, including measures of functional health. Traumatic events studied include parental divorce, death of a child, experience of a traumatic or life threatening injury, and death of a parent when a child.

These studies consistently show that traumatic events earlier in life are adversely related to a variety of physical and psychological health outcomes in mid and later life (Kuh et al. 2002b, Krause et al. 2004, Shaw and Krause 2002). For example, Krause and colleagues (2004) found exposure to cumulative trauma across the lifecourse (defined as exposure to a series of traumatic life events including parental unemployment, physical abuse by a spouse, death of child etc.) to be associated with worse

health at older ages (Krause et al. 2004). Moreover, traumatic experiences occurring in young adulthood (18-30 years) and in mid-life (ages 31 to 64) showed the strongest relationship to current health status among those currently aged 65 and over (Krause et al. 2004).

Studies which have focused on the experience of war have shown that men who entered active duty later in World War II, after age 30, were more likely to experience adverse physical health trajectories (Elder et al. 1994). Those who were evacuated as children without their parents during World War II reported higher prevalence rates of cardiovascular disease and type 2 diabetes in late adulthood (Alastalo et al. 2009).

In the literature search no references were found relating to the experience of migration and its relationship to later life health outcomes in the UK, and only a few references from the US were located (Buckley et al. 2000, Colon-Lopez et al. 2009). One study found early compared to late migration among Mexican immigrants in the US to be associated with higher rates of cardiovascular mortality (Colon-Lopez et al. 2009). Most of the work in the UK has explored the relationship between country of birth and mortality discussed earlier in section 4.2, but has not examined the timing of migration (Harding and Maxwell 1997).

4.4 Work histories

Given the lack of detailed retrospectively or prospectively gathered information on paid work, partnership and parenthood

histories, less research has been able to investigate the impact of cumulative experiences across the lifecourse. In the UK, retrospective life history information for older people in the Boyd-Orr 1937-39 cohort study, the longitudinal Retirement Study (based on those aged 55-69 in 1988/89 and re-interviewed in 1994); and the BHPS has permitted the examination of the relationship between work and, related to this literature, the impact of income and family histories, including care giving, and health at older ages.

The 1937-39 Boyd-Orr cohort study was designed to examine the impact of various life course factors on health (Blane 2005). At follow-up in 1997/98, surviving participants were interviewed using a life grid collecting detailed retrospective life course information (Blane 2005). Thus, in addition to collecting measures of socio-economic position at each stage in the life course (as previous studies have done, see discussion in section 4.1) the Boyd-Orr cohort study also collected detailed retrospective information on participants' lives enabling the study of cumulative advantage and disadvantage across the life course.

The researchers created lifetime exposure scores to a variety of hazards (Holland et al. 2000). They then investigated how these accumulated exposures (work history measures such as years on benefit and years out of the labour force as well as the number of years exposed to inadequate nutrition) were related to indicators of well-being

such as quality of life. In general, they found long term influences on health to be less important when compared to circumstances in late life, such as current health status and affluence. However, number of years out the labour force continued to have a negative relationship with quality of life even when later life health and material circumstances were taken into account (Blane et al. 2004).

Work based on the ONS Retirement Surveys found the proportion of adult life spent being unemployed and the experience of being dismissed from work to be associated with poorer health and disability in early old age (Grundy and Holt 2000). A study based on the BHPS 1991-2000 focusing on those aged 16 to 60, examined the association between types of work history measures, namely changes in atypical work arrangements defined in terms of temporary employment and few hours worked per week, and changes in health outcomes, that is mental health, self-reported general health and life as well as job satisfaction (Bardasi and Francesconi 2004). The results showed that temporary work arrangements and part-time work did not have a long term negative impact on the health measures considered.

Although there is a considerable body of work examining the association between work place conditions at certain time points across the life course and health (Marmot et al. 1997), less work has examined the cumulative impact of the work environment across a person's working life. Research based on the US

PSID examined the association between lifetime exposure to work conditions, for example: job control, perceived psychosocial job demands, work support and physical demands; and mortality (Amick et al. 2002). Of these factors, a working life spent in low control jobs or in passive jobs (that is those with low perceived demands) increased the hazard of death (Amick et al. 2002). They also found that the more of one's adult life spent in being unemployed, the greater the impact on mortality (Amick et al. 2002).

Several studies have examined the relationship between income and physical and mental health over time, taking into account prior health status (Benzeval and Judge 2001, Lynch et al. 1997, Kaplan et al. 2008, Kasper et al. 2008, McDonough et al. 1997, Thomas et al. 2005) For example, using the BHPS, Benzeval and Judge (2001) explored the relationship between income (measured across the first six waves of the survey) and health. In line with other studies that have taken baseline health status into account, they found longer-term income to have a greater impact on health than current income and persistent poverty to be worse for health than episodic poverty (Benzeval and Judge 2001).

4.5 Family histories

There is a substantial literature on variations in health by marital status. Decades of research have found married people to have better mental and physical health in comparison to the unmarried (Gove 1973, Thomas et al.

2005, Verbrugge 1979). It is thought that marriage may act as a buffering mechanism in stressful situations; for example, studies have found marriage to enhance the immune system (Kiecolt-Glaser et al. 1987); facilitate access to medical information and services; constrain risk-taking and encourage healthy behaviours; and substitute for formal health care (Waite 1995).

However, fewer studies have investigated the association between marital histories and health at older ages (Brockmann and Klein 2004, Grundy and Holt 2000, Lillard and Waite 1995). Lillard and Waite's (1995) seminal study based on the USPSID (using annual indicators of marital status as well as information from the detailed retrospective marital histories collected) examined the relationship between marital duration and the hazard of dying over a 20 year period. The analysis was based on everyone aged 10 or older. Results from this study showed a distinct mortality advantage for those in marital unions of longer durations (Lillard and Waite 1995).

Grundy and Holt (2000) found early age at marriage, and more than one marriage, to be associated with poorer health and disability in early old age. Brockman and Klein's (2004) study of marital histories and mortality also generally found greater survival benefits for those in unions of longer duration; and a past experience of widowhood and/or divorce to have an adverse impact on the survival of men, but no demonstrable effect for women (Brockmann and Klein 2004).

Studies have investigated various dimensions of people's childbearing histories and their relationship to health outcomes in mid and later life including number of children, timing of first and last birth, spacing of birth intervals, and whether people were married at their first birth. Numerous studies have examined the association between number of births (a summary measure of childbearing history) and mortality.

A recent review of studies evaluating the effect of number of children on mortality found research based on contemporary rather than historical populations to show higher mortality for women with more children, and also among women with no children (Hurt et al. 2006). Other studies have found similar patterns for women (Grundy and Tomassini 2005, Grundy and Kravdal 2008, Jaffe et al. 2009, Koski-Rahikkala et al. 2006), as well as for men (Grundy and Kravdal 2008, Jaffe et al. 2009). However, not all studies found a consistent pattern in this association (Henretta 2007, Spence 2008).

For women, timing of childbearing, in addition to number of children, has also been linked to health outcomes at older ages (Doblhammer 2000, Grundy and Holt 2000, Grundy and Tomassini 2005, Grundy and Kravdal 2008). Studies have reported associations between early childbearing (before age 20), mortality (Doblhammer 2000, Henretta 2007, Grundy and Tomassini 2005, Grundy and Kravdal 2008), physical (for example heart disease, lung disease, cancer) (Grundy

and Holt 2000, Grundy and Tomassini 2005, Henretta 2007, Spence 2008) and mental health in either mid or later life.

On the one hand, some studies have shown late childbearing (after ages 39) to be associated with lower mortality (Grundy and Tomassini 2005, Grundy and Kravdal 2008), while on the other hand, several studies found no association between higher parity and mortality or other physical health outcomes (Henretta 2007, Spence 2008). The association between later ages at birth and survival is likely to be due to selection effects: those who are able to get pregnant and carry a baby to term in their 40s are by definition likely to be fit and healthy. While some studies have reported an association between short birth intervals and higher mortality risks (Grundy 2005) others found no such association (Henretta 2007).

Henretta (2007) showed being unmarried at first birth to be associated with higher mortality: this was associated with lower socio-economic status in mid-life leading to poorer health in later life (Henretta 2007). Being unmarried at the time of first birth was also found to be associated with the presence of diseases such as heart disease and stroke at older ages (Henretta 2007).

Finally, few studies have examined the association between carrying out both work and family responsibilities over the lifecourse and their impact on health outcomes in later life. Glaser and colleagues (2005) using the retrospective paid work, parenthood and care-giving

histories in the ONS Retirement Surveys, found that for mid-life men and women, the combination of care-giving with other family (such as parenthood) and work roles had few negative health consequences (Glaser et al. 2005).

4.6 Summary

- Social inequalities in health persist at older ages and, as at younger ages, these inequalities have widened over time, that is, there has been an increase in the gap in life expectancy at age 65 between Social Classes I and V.
- Women live longer than men although they spend more of their lives in poor health. However, the gender gap in life expectancy at birth and at age 65 has recently narrowed.
- People from ethnic minority groups in the UK (as well as in the US) are more likely to report poor health. However, there is limited information on the mortality and morbidity of older people from ethnic minority groups in the UK.
- Research examining circumstances in childhood and in adulthood has shown the continued impact of childhood factors, such as father's social class, on later life health. However, current circumstances such as health and socio-economic status, appear to have greater influence on health outcomes.
- The key triggers identified in the literature in terms of their impact on health are age at retirement, loss of a job, and the experience of traumatic events in mid or later life, including being in active service or the experience of evacuation.
- There is also a considerable body of research on the health effects of bereavement. Comparing the bereaved with the non-bereaved show that mortality is higher among the bereaved, even when health and socio-economic group are controlled for, and that outcomes are worse for men than for women.
- Early age at retirement, experiencing a job loss, and the experience of traumatic life events, especially later in life, are also associated with poorer physical, and in some cases, mental health in mid and later life.
- More time spent unemployed is generally associated with poorer health, as is working life spent in low control jobs or in passive jobs. Life-long economic hardship is also associated with worse health outcomes in later life.
- People who have spent most of their adult life being married outlive those who have not. Past experience of widowhood and/or divorce has an adverse impact on the survival of men, but there is no demonstrable effect on women.
- With respect to childbearing histories, the literature generally shows that for women, having more children, teenage childbearing and being unmarried at first birth are associated with worse health outcomes in later adult life.



5. Social support

This chapter reviews the literature on the association between life events and experiences and social support at older ages. It begins by briefly discussing what is known about inequalities in support and discusses differences in support by gender and ethnicity.

5.1 Social support in later life

Social support, for example, social engagement and assistance including care, is widely acknowledged as a key dimension of quality of life at older ages (Bowling et al. 2002). A recent study showed that social relationships with family and friends ranked as being among the most important factors influencing a good quality of life among older people (Bowling et al. 2002). Moreover, the positive association between social relationships and multiple dimensions of health and well-being for both men and women is widely recognised (Berkman and Syme 1979, Bowling and Grundy 1998, House et al. 1982, 1988a, 1988b). For example, Berkman and Syme's (1979) and House and colleagues' (1982) seminal research found social ties including marriage, contacts with close friends and relatives, church membership and other group affiliations, to lower mortality risks in a 10 to 12 year follow-up period.

However, in contrast to the considerable body of research on the relationship between social support and health, the determinants of the support systems of older people remain poorly understood.

In particular, the impact of life course factors, including trigger events and long-term experiences, on support at older ages has received little attention. This is a critical issue as social support is not only a key dimension of well-being at older ages as noted above (Bowling et al. 2002), but changes in family behaviour, such as rises in divorce and declines in fertility, have made it important to understand how trends in family and work life may affect future support and care.

The social support systems, and hence well-being, of older people may have been adversely affected by trends in family behaviour and work patterns including rises in divorce and early exit from the labour force. Britain, like other industrialized countries, has witnessed significant changes in family structure and relationships in recent decades. Such changes suggest that today's older people have more diverse family networks than previous generations (Wachter 1997). Given these trends, researchers have begun to focus on the relationship between disruptions in key life course events, and in particular on family disruption due to divorce, separation, death, or re-partnering, and their relationship to support in later life (Furstenberg et al. 1995, Pezzin and Schone 1999).

In addition, much of the literature on social support has focused on the importance of family ties for social

well-being in later life, with less research examining the influence of contacts with non-family members such as friends and neighbours. Yet social ties outside the family are also important. For example, studies comparing the effect of friendship and family relations on mortality found the risk of dying to be more closely associated with infrequent contact with friends than with relatives (Rasulo et al. 2005).

Before proceeding, given the lack of clarity in the literature in terms of what is meant by support, it is important to define this concept here. One of the main difficulties in studies of support has been conceptualising and measuring this multi-dimensional concept (see Barrera 1986, Hermalin 2002, and House 1988). Support is usually defined in terms of:

- (i) social network characteristics
- (ii) social embeddedness such as the frequency of contact with others
- (iii) emotional assistance, reflecting current and future availability of emotional support, and
- (iv) instrumental assistance (that is transfers of space, time, and money) from family, friends, neighbours and other community members (Barrera 1986, Hermalin 2002, House et al. 1988b).

The term social support as defined here broadly describes what other researchers have termed social integration or social participation; the latter concept is often defined as social interaction with persons other than a spouse.

Given the multidimensionality of the concept of support, this chapter will focus on two dimensions of support:

- (i) contact with family members and friends, a measure of social embeddedness, and
- (ii) the use of help, such as assistance with personal care and/or household or other tasks from family, friends and neighbours.

Co-residence, an often studied dimension of support capturing space transfers, will not be considered here given the extensive literature on the living arrangements of older people (Palloni 2001, Tomassini et al. 2004). While co-residence does not in itself imply provision of support by adult children to elderly parents, and in some cases may in fact be indicative of support provided by elderly parents to adult children, it has nevertheless been regarded as a vehicle for the provision of social and financial support. It has thus, retained value as an indicator of support.

5.2 Trends in inequalities in social support at older ages

Unlike health and financial well-being, less work has documented inequalities in social support at older ages, for example, contacts with family and friends and in the use of help. To our knowledge, no studies have documented trends in these inequalities over time.

Much of the work in this area has focused on socio-economic differences in help received. In general, studies which have

examined the relationship between socio-economic factors (such as income, education, occupation, tenure status) and the use of help among older people have found a negative association with informal help from kin: those in higher socio-economic groups are less likely to receive assistance from relatives than those in lower status groups (Almond et al. 1998, Broese van Groenou and van Tilburg 2003, Henretta et al. 2002, Grundy 2005).

However, recent research examining differences across countries in the receipt of assistance found no statistically significant relationship between indicators of socio-economic status, such as education or social class, and the use of help from family members or friends (Shea et al. 2003). Moreover, socio-economic status appears to behave in different ways across societies. For example, the association between better financial conditions and solitary living is not found in all societies (Wolf 1995). Home ownership and high education, two proxies for higher social status, were found to be strongly positively associated with co-residence among older people in Italy but not in Britain (Glaser and Tomassini 2000).

Studies have shown that socio-economic inequality in help used is explained, to a large extent, by the greater need for assistance among persons with lower socio-economic status (SES) due to their poorer health (Almond et al. 1998). As reported in Chapter 4, a considerable body of research across all societies

has shown that unfavourable socio-economic circumstances are strongly related to higher levels of morbidity and mortality (Goldblatt 1990, Marmot and Wilkinson 1999) and that socio-economic differences in health persist into old age (Marmot and Shipley 1996, Martelin et al. 1998).

A recent study by Broese van Groenou and colleagues (2006) examined socio-economic status differences in the receipt of assistance from family members and formal sources using data from Britain, Belgium, Italy and the Netherlands. In analyses considering each country separately, they found that low socio-economic status individuals in most cases (a finding supported by the literature discussed above) received substantially higher levels of care from family members, even after adjusting for other factors such as sex, age, disability and marital status. In contrast, socio-economic status differences in receipt of care from private or public sources was largely accounted for by other factors such as age, health and marital status.

In addition, inequalities in the use of informal help appeared larger in the Netherlands, followed by Britain and Italy, and were the lowest in Belgium. Moreover, in all countries, old age, poor health and living alone explained socio-economic differences in formal help received, but a large part of the SES differences in informal help remained unexplained in most of the countries studied.

Frequency of contact with others, both friends and relatives, is an often used measure of social support. Research on contacts with wider kin networks, outside the immediate family, has largely focused on measuring frequency of contact (Jarvis 1993, Finch 1989, McGlone et al. 1999, Grundy et al. 1999, Grundy 2005, Henretta et al. 2002); with less work investigating the correlates of contact with friends in later life (Arber et al. 2003, Grundy 2005, Henretta et al. 2002, Tomaszewski and Barnes 2008).

Studies which have investigated factors associated with lack of social contacts, capturing relative social isolation, have found gender, marital status, material resources (such as car ownership) and health to be mostly positively related. For example, older people who did not own a car reported lower odds of rare social contacts with relatives, friends and neighbours (Arber et al. 2003). Using ELSA, Tomaszewski and Barnes (2008) reported that low education levels were associated with greater social detachment, a summary measure which included frequency of contact with family and friends.

5.3 Inequalities in social support in later life

Gender

Research on gender differences in old age has mostly focused on poverty and retirement (Arber and Ginn 2004) and health (Kinsella and Gist 1998), with less work investigating gender differences in support, such as the provision of care or in social networks (Arber et al. 1988).

Any study of social support in later life must take gender differences into account as patterns of social relationships have been shown to vary by gender (Rasulo et al. 2005, Shye et al. 1995). It has been suggested that on the one hand, men tend to maintain close, intimate relationships with only a few people, primarily their spouse; while on the other hand, women appear to be more oriented toward relationships outside the household. However, the evidence for gender differences in social relationships is mixed; some studies demonstrate that men have more frequent contacts with friends (Powers and Bultena 1976), whereas others show that women's social interaction with both friends and relatives is more frequent (Turner and Marino 1994, Martire et al. 1999).

Studies have also found that men and women have similar rates of social interaction with family members and friends (Moore 1990, Rasulo et al. 2005). Gender differences in patterns of social exchange appear to be fairly consistent across the adult life span (Shye et al. 1995).

With respect to gender differences in the use of help, Tomassini and colleagues (2003) found older unmarried women to be more likely than men to receive family help in Britain; however, no gender differences in the receipt of help among older unmarried people were found in Italy (Tomassini et al. 2003). The study focused on unmarried older people as they lack the most important source of support in later life: a spouse (Barrett and Lynch 1999).

Gender differences in the receipt of family help in Britain may reflect men's decreased involvement in family life, which may reduce the likelihood of receiving help in old age. Several studies show, for example, that unmarried men have significantly less contact with their children than their female counterparts (Silverstein 1995). Other hypotheses could include the fact that older unmarried women may be more likely to ask for help or their larger social networks may enable greater exchanges of assistance (Shye et al. 1995).

In Italy, the family may be performing the helper role regardless of the sex of the older person receiving the assistance. These results are in line with the familism perspective which hypothesises that family members consider their own well-being and their family's well-being to be the same, so that help is provided to each member of the network regardless of their individual characteristics (Reher 1998).

This familistic culture may explain the strong family ties existing in Southern Europe (Reher 1998). For example, in Italy, parents and adult children continue to have a strong relationship, even when the latter move away in order to form their own families. In Britain, there is a stronger individualistic culture, involving looser and less geographically close family ties, more emphasis on voluntaristic relationships (for example, recent research has shown that friends are becoming more important in older people's 'personal communities' (Phillipson et al. 2001)), and greater

preference for independent living. Since children are more likely to be their parents' carers, a family system that provides strong connections between generations is less likely to create unique relationships between carer and cared for.

Ethnicity

Contrary to the widespread perception of better social support among ethnic minority communities in comparison to the general population, data from the Health Survey for England has shown lower perceived levels of support (Erens et al. 2001). However, there is a dearth of quantitative research on support among ethnic minority groups at older ages in Britain.

Rosenthal argues that it is not ethnicity per se, but cultural values which influence behaviour (Rosenthal 1986). Culture is a component of ethnicity, and the extent to which one acts upon cultural values may be determined by one's degree of commitment to an ethnic identity. According to Rosenthal, the cultural value of familism - that is, a sense of filial responsibility and strong kinship ties - dictates high levels of intergenerational support. Nevertheless, there can be individual differences in levels of support among people belonging to an ethnic group holding the cultural value of familism. That is, simply belonging to a familistic society does not automatically equate to higher levels of support.

Others have argued that ethnic minority groups may have higher levels of social support than white groups because of their greater need, caused by their greater levels of ill-health or disability (Mangum et al. 1994). An alternative, and complementary, idea is that the generally poorer socio-economic status of ethnic minority groups leads to a greater reliance on close networks (Mutran 1985). Ongoing research at King's College London is exploring the relative determining power of ill-health, income/SES, and ethnicity on social support in old age (Willis 2008).

Research from the USA has described ethnic minority groups having a stronger sense of familism than white American families (Yeo and Gallagher-Thompson 2006). This has led to the assumption that higher levels of family support for older people are present among these minority groups. Indeed, the earlier US literature has generally found that ethnic minority groups have strong social support and kinship ties (Markides and Black 1996). This is usually said to be due to the cultural values of familism (especially Hispanics) and filial piety (especially East Asians). However, there is an expectation within the US literature that acculturation will dilute these strong networks (Markides and Black 1996).

More recent research has revealed contradictory findings. Dilworth-Anderson et al. (2002) reviewed the US research on carers and ethnicity, and found equal levels of informal support for carers among the three ethnic groups studied (African American, Hispanic and non-

Hispanic white). However, the informal helping networks of the minority groups were more diverse, containing friends as well as family, and the white group was more likely to use formal services as well as informal.

A contrasting finding was reported by Ajrouch et al. (2001), where the black group had more kin in their social network, and their networks were smaller than those of the white group. Furthermore, Barnes et al. (2004) found, in a longitudinal study, that the black group actually had smaller networks and lower levels of social engagement when compared to the white group. Moreover, there is evidence of a convergence in social network composition with increasing age between black and white US groups (Ajrouch et al. 2001), in that younger black groups had more family members in their social network when compared to white groups, but this difference narrowed with age.

It is, perhaps, the direction of support which is crucial. Mutran (1985) found that older black parents were more likely than older white parents to give support to their children, but there was no difference in the likelihood of receiving support from their children once differences in level of need were controlled for (Mutran 1985).

Additionally, the way in which support is measured is quite varied across the studies (for example social networks, social participation, and received support), and may be responsible for

the inconclusive outcomes. Finally, it has been suggested that a generational effect may explain the inconsistent findings: the older generation of African-Americans may indeed have had larger social networks, but the younger-old generation may no longer fit this pattern (Barnes et al. 2004).

The idea that ethnic minority families 'look after their own' is also widespread in Britain (Patient UK 2007). For example, the Social Services Inspectorate found some staff believed that South Asian participants did not require formal support services because of an assumption that support needs were being met by family members (Murray and Brown 1998). Voluntary organisations have also attributed a low take-up of their services among ethnic minority groups to an assumption that these groups live in self-supporting family units (Dungate 1984).

Although some British researchers have refuted this claim (Katbamna et al. 2004, Downes 2007), until recently, little quantitative research based on nationally representative samples had been carried out investigating levels of support among ethnic minority older people in Britain. In the past, research in this area was largely based on small scale qualitative studies of the experience of support providing little scope for comparison across ethnic groups. An exception is the EMPIRIC study, which examined evaluations of support received from the person closest to the respondent (Stansfeld and Sproston 2002), but without consistent ethnic group findings.

Recent work (Willis 2008) based on nationally representative data has shown that the relationship between ethnicity and family support may not be as straightforward, nor as stereotypical, as was previously thought. Contrary to the assumption of advantageous inequality, that being of an ethnic minority group entails higher levels of support in old age than the ethnic majority; the results of this study revealed parity in levels of support given and received by older people across the ethnic groups in England and Wales. The only exception to this was that Black Caribbean older people actually gave less support in comparison to their white British counterparts.

It is possible that the lack of significant differences in levels of support may reflect ethnic group differences in the interpretation and meaning of support. Certain ethnic groups may interpret 'help or support' differently, and may not consider that the things they do for family members count as support, but are instead part of normal exchanges between family members. However, these findings challenge the stereotype that ethnic minority older people do not need formal services because they 'look after their own'.

5.4 Trigger events

Researchers have emphasised that support is not a static concept but is likely to be influenced by changes in life events, including marital disruptions such as divorce (Thoits 1982). Hence, emphasis has been increasingly placed on the importance of investigating changes

(losses and/or gains) in support after life events have occurred (Thoits 1982). But while some studies have examined loss of support, both instrumental and emotional, at older ages (Broese van Groenou and van Tilburg 1997, Cornman et al. 2004, Field and Minkler 1988, Geerlings et al. 2005, Glaser et al. 2006b, Kelman et al. 1994, Krause 1999, Martire et al. 1999, van Tilburg 1998, Utz et al. 2002, Walter-Ginzburg et al. 1999), fewer have considered the impact of trigger events or longer-term experiences (Cornman et al. 2004, Geerlings et al. 2005, Kiecolt-Glaser et al. 1987, Stoller and Pugliesi 1991, Utz et al. 2002).

Most of these studies have largely focused on how baseline measures of support and changes in support differ by socio-economic status, marital status and ethnicity. The few that have looked at trigger events have largely considered the impact of bereavement on support and changes in support. For example, Utz and colleagues (2002) found that widowhood increased informal social participation (such as social interaction with friends) but not formal (including meeting attendance, religious participation and volunteer activities) most likely due to the increased support offered to the recently bereaved.

The other trigger event studied has been health changes. Cornman and colleagues (2004), using a longitudinal Taiwanese study, found that reporting a disability in earlier waves was associated with less perceived support, but with more perceived support in later waves.

This may be due to increases in the receipt of instrumental assistance as those in poor health are more likely to get help. Geerlings and colleagues (2005) found the incidence of chronic diseases and functional limitations to be associated with the onset of informal care while others also found diminishing health to increase the scope but not the size of social networks (Stoller and Pugliesi 1991).

In addition to investigating the impact of bereavement and changes in health, researchers have also begun to examine the support implications of marital disruptions, due to divorce or separation in addition to death. Marital disruption at older ages is an important issue as it removes the usual primary source of help and support: a husband or wife (Barrett and Lynch 1999).

Few of the studies that have examined loss of support (instrumental and emotional) at older ages have considered the impact of marital disruptions. Those that have reported that losing a partner had no effect on perceived support in Taiwan among those aged 60 and over (Cornman et al. 2004) or on the onset of informal care in the Netherlands (aged between 55 and 85 years at baseline) (Geerlings et al. 2005), while others showed an increase in instrumental support in Israel (age 75 and over), the Netherlands (55-89 years) and in Detroit, Michigan (65 years and over) (Broese van Groenou and van Tilburg 1997, Utz et al. 2002, Walter-Ginzburg et al. 1999).

However, most of these studies did not distinguish whether the marital disruption was due to death or divorce.

Most likely this was because studies are largely based on relatively short time intervals (one to five years) resulting in small numbers of older adults who have experienced such disruptions.

Findings from recent research showed that marital disruption, and widow(er)hood in particular, increased loss of support (Glaser et al. 2006b). Widowhood had a similar effect to divorce on reducing contact with friends even when health status was taken into account, but was not significantly associated with perceived support. In terms of other family factors, while number of children showed a significant relationship with loss of perceived support, it did not significantly impact on loss of contact with non-relative friends. Ever having lived with a step-child demonstrated no relationship with loss of perceived support (Glaser et al. 2006b).

5.5 Life histories

Moreover, there has been little investigation of the impact of experiences across the life course on support in later life. This is despite the fact that differences between men and women in labour force participation, and in family responsibilities, are likely to create different opportunities for establishing and maintaining social ties and contacts (Fischer and Olicker 1983). For example, labour force participation may enhance opportunities for ties with friends (Moore 1990), whereas women's kin-keeping role may enhance ties with family members (Turner and Marino 1994).

An exception to the lack of research in this area is the growing body of evidence in the United States and The Netherlands that partnership disruptions over the life course, particularly divorce, have adverse consequences for support at older ages (Aquilino 1994, Bulcroft and Bulcroft 1991, Cooney and Uhlenberg 1990, Furstenberg et al. 1995, Kalmijn 2007, Pezzin and Schone 1999). In comparison to those in intact marriages, those who have divorced and remarried tend to experience decreased contact and relationship quality with adult children as well as perceived support from children (or from any source).

Fewer studies have focused on transfers between parents and their adult children, and here the evidence is less clear: some studies have reported no relationship between parental divorce and any help given or received (Aquilino 1994, Pezzin and Schone 1999), whereas others have reported a negative relationship with time and money transfers (Furstenberg et al. 1995, Kalmijn 2007). Contrary to previous studies, Glaser and colleagues found that older divorced or separated parents (those aged 70 and over) in the UK were more likely to receive help from children compared to those in a current partnership (Glaser et al. 2008).

Some studies have also investigated the association between widowhood and support. Unlike parental divorce, most studies have shown no significant relationship between widowhood and contact (Bulcroft and Bulcroft 1991); however, the few studies able to examine

widowers separately have shown lower contact levels compared with fathers in intact marriages (Kalmijn 2007). With regard to measures of instrumental assistance, most research has shown that widowed parents receive more support from children compared with still-married parents (Ha et al. 2006). However, a recent study showed a negative relationship between widowerhood and instrumental assistance (Kalmijn 2007).

Studies have established some variations in the long-term outcomes of partnership dissolution and identified influential factors. Parent's gender is clearly important, for partnership dissolution has a greater negative impact on late-life support for men in comparison to women. This is generally explained in terms of mothers being closer than fathers to their children (Furstenberg et al. 1995, Kalmijn 2007).

The timing of divorce also appears to be important for help received, at least from children in later life. That is, the younger the age of the child at the time of the parental partnership disruption, whether due to divorce or widow(er)hood, the lower the level of contact and exchanges reported by older parents (Furstenberg et al. 1995). The existence of stepchildren is a factor, for older parents are less likely to receive assistance from stepchildren than biological children (Pezzin and Schone 1999).

5.6 Summary

- People in lower socio-economic status groups are more likely to receive informal support from family and friends, even when other characteristics are controlled for.
- In the UK older unmarried women are more likely to receive help from family and friends than their male counterparts, even when other factors such as disability status are taken into account. This relationship is not consistent across countries. For example, in Italy there is no gender difference in help received among unmarried older people once characteristics such as current health status are controlled for.
- Contrary to popular belief, recent work shows few differences in support given and received by older people across ethnic groups in England and Wales.
- Evidence is contradictory on the association between loss of a spouse and contact with friends. Some studies show that losing a spouse, through either death or divorce, reduces contact with friends whereas others report that widowhood increases social contact. In contrast, the onset of poor health is associated with increased support at older ages.
- Research has generally shown that marital disruptions over the life course, particularly divorce, have adverse consequences for support at older ages. However, recent work in the UK shows that older unmarried men and women are more likely to receive support from children than their married counterparts.

6. Conclusion

This research was commissioned by the Commission and Age Concern and Help the Aged to systematically review the literature on the impact of life course influences (trigger events and long-term experiences) on health and well-being in later life. Overall, it finds a considerable literature on the association between life course factors and health, and mortality in particular, at older ages. But it finds less research on the impact of these factors on poverty or financial circumstances, or on social support in later life.

In general, the most commonly studied trigger events on health and well-being are loss of a spouse, onset of retirement, and onset of a disability. Little work has explored the impact of other trigger events such as:

- (i) becoming a grandparent
- (ii) becoming a carer
- (iii) losing or starting a job
- (iv) experiencing a significant financial loss, for example, losing one's savings or pension
- (v) receiving an inheritance, or
- (vi) moving home or moving abroad.

Similarly, onset of retirement, loss of a spouse and onset of disability are the three most commonly studied life events affecting later life poverty and low income. These three trigger events are all associated with lower incomes and poverty at older ages.

Contrary to what was expected, emerging evidence suggests that work and marital histories may not be important in determining low income in later life, once other factors such as occupation and education are taken into account. However, other studies point to the importance of both work and marital histories in relation to poverty in later life.

Little of the research in this area has examined other trigger events such as becoming a carer or moving home or abroad. It is important to note that education, social class and disability continue to be important predictors of late life poverty. Also, that women and people from ethnic minority groups are more likely to have low incomes and be poor at older ages.

The key triggers identified in the literature in terms of their impact on health at older ages are age at retirement, loss of a job, and the experience of traumatic events in mid or later life (such as the death of a parent) as well as being in active service or the experience of being evacuated during war time. There is also a considerable body of research on the health effects of bereavement. Early age at retirement, experiencing a job loss, and the experience of traumatic life events (especially later in life) are all associated with poorer physical, and in some cases, mental health in mid and later life.

There is also a well-known bereavement effect: that is men and women who lose a spouse have higher mortality and morbidity in comparison to the still married and the outcomes are worse for men than for women.

Research examining circumstances in childhood and in adulthood has shown the continued impact of childhood factors, such as father's social class, on later life health. However, current circumstances, such as disability status and socio-economic status, appear to have a greater influence on health outcomes at older ages. With respect to cumulative life history measures, studies show that more time spent unemployed is generally associated with poorer health, as is a working life spent in low control jobs or in passive jobs. Life-long economic hardship is also associated with worse health outcomes in later life.

Moreover, people who have spent most of their adult life being married outlive those who have not. The past experience of widowhood and/or divorce has an adverse impact on the survival of men, but there is no demonstrable effect on women. With respect to childbearing histories, the literature generally shows more children, teenage childbearing, and being unmarried at first birth to be associated with worse health outcomes in later adult life for women.

It is important to remember that as above, socio-economic factors, such as education and social class, continue to be important predictors of poor health. In addition, there are well-established gender and ethnic inequalities in health. Women live longer than men although they are more likely to be in poor health. People from ethnic minority groups in the UK are more likely to report poor health, although less is known about ethnic inequalities in health at older ages.



Much less research has investigated the impact of trigger events or cumulative measures of life course experiences on support in later life. The work on trigger events has largely focused on the association between marital disruptions and support, with some work investigating the onset of poor health. The evidence is contradictory on the association between loss of a spouse and contact with friends; some studies show that losing a spouse, through either death or divorce, reduces contact with friends whereas others report that widowhood increases social contact with others. In contrast, the onset of poor health is associated with increased support at older ages.

Research has generally shown that marital disruptions over the life course, particularly divorce, have adverse consequences for support at older ages. However, recent work in the UK shows that older unmarried men and women are more likely to receive support from children in comparison to their married counterparts.

There are also gender inequalities in receipt of support. In the UK, older unmarried women are more likely to receive help from family and friends than their male counterparts even when other factors such as disability status are taken into account. This relationship is not consistent across countries. For example, in Italy there is no gender difference in help received at older ages among unmarried people once characteristics such as current health status are

controlled for. However, contrary to popular belief, recent work shows few differences in support given and received by older people across ethnic groups in England and Wales.

To conclude, what are the implications of these findings for policy development? There is obviously a need to tease out the relationship between work and marital histories, occupation, education, marital status and other relevant factors (all of which are highly interrelated), with income in later life. The evidence is mixed and sometimes contrary to expectations and clarity is needed to ensure that policy is relevant and benefits those in greatest need. The final chapter of our companion study (Glaser et al. 2009) contains a more detailed discussion of the implications arising from this and what it may mean for future policy development.

Understanding of the impact of trigger events on the health and well-being of individuals is also vital and policies could be geared specifically to the needs of people who have experienced such events, be it bereavement, loss of a job or unemployment. Improved understanding of different patterns of social support, with attendant links to marital and parental status, could also benefit those who might otherwise be at higher risk of isolation in later life. This is particularly true of the ethnic minority population about which comparatively little is known and assumptions of need are made on limited evidence.



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Endnotes

1 Studies investigating the link between lifecourse factors and outcomes in later life were initially searched in Web of Knowledge and Pubmed. For each of the three outcomes (described in detail below) the following search strategy was used to capture the relationship between all outcome measures and each of four potential lifecourse factors and events: life course, marital history, fertility history and occupational history. Search terms were (including truncation symbols, exact phrases, and Boolean logic): ("life histor*" OR "life event" OR "life course" OR lifecourse); ("marital histor*" OR "marital disruption" OR partnership OR dissolution OR divorce OR bereavement); ("fertility histor*" OR "reproductive histor*"); and ("work histor*" OR "occupational histor*" OR "employment histor*" OR redundan* OR unemploy*). The searches covered words in the title, abstract or in key words. The search strategy for the outcomes of interest (that is: health, financial well-being and social support) was as follows: (health OR mortality OR illness OR disab); ("social support" OR "social network" OR "informal help" OR "perceived support" OR "social participation" OR "social interaction" OR "social embeddedness" OR "informal support" OR "informal care"); and (income OR poverty

OR pension* OR financ*). Each of these three outcome strings were entered in turn into Web of Knowledge and PubMed, with each of the search strings for the lifecourse factors and events in addition to search terms identifying the population of interest: (elderly OR ag*ing OR "late* life"). For example, in order to search for the relationships between fertility histories and later life financial outcomes the following three search strings would have been combined: ("fertility histor*" OR "reproductive histor*") AND (income OR poverty OR pension* OR financ*) AND (elderly OR ag*ing OR "late* life").

The other websites did not contain the same search functions as Web of Knowledge and PubMed so a simpler search strategy was employed. The words lifecourse, poverty, social support, health and older people were combined in order to locate 'grey' literature on these websites.

- 2 Measured as below 60 per cent of median income equivalised for household size, before and after housing costs.
- 3 Only Cyprus, Greece, Spain, Portugal and Ireland have higher rates for older people's poverty.
- 4 Calculated using the DWP tabulation tool at:
<http://www.dwp.gov.uk/asd/tabtool.asp> on 29 May 2009. The figures take into account claims by partnered men and women for their partners.
- 5 Calculated using the DWP Resource Centre Tabulation Tool at:
<http://www.dwp.gov.uk/resourcecentre/>
- 6 For a single person before housing costs, 60 per cent of median income equivalised for household size (HBAI, 2007).
- 7 All surveys except for the FWLS are described in detail in Appendix 1 of our companion report, Glaser et al. (2009) *Life course influences on poverty and social isolation in later life: a secondary analysis*, also available from:
www.equalityhumanrights.com
- 8 The West of Scotland Collaborative Study included 21 years of follow-up with men aged 35-64 at the start of the study, between 1970 and 1973.



What is Just Ageing?

The Equality and Human Rights Commission, and the new merged charity Age Concern and Help the Aged, have joined forces to investigate and develop an understanding of equality over the life course and to identify solutions to inequalities in later life.

To find out more about the Just Ageing? programme and receive details of future events, please email justageing@equalityhumanrights.com. You can also visit our website to find out more at www.equalityhumanrights.com/justageing

Who we are

The Equality and Human Rights Commission is working to eliminate discrimination, reduce inequality, protect human rights and ensure that everyone has a fair chance to participate in society.

Find out more about the Equality and Human Rights Commission via our website at:

www.equalityhumanrights.com
or by contacting one of our helplines.

England helpline: 0845 604 6610
Textphone: 0845 604 6620

Scotland helpline: 0845 604 5510
Textphone: 0845 604 5520

Wales helpline: 0845 604 8810
Textphone: 0845 604 8820

Monday to Friday, 9am-5pm

 **Equality and
Human Rights
Commission**

Age Concern and Help the Aged

have joined together to form Age UK, a single charity dedicated to improving the lives of older people. We are a new charity with a clear vision: a world in which older people flourish. We work with a range of partners to ensure that together we can improve the lives of older people.

To find out more about Age Concern and Help the Aged visit our website at:

www.ageconcern.org.uk

or e-mail us at:

info@ace.org.uk

or call us on:

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Age Concern England (charity number 261794) has merged with Help the Aged (charity number 272786) to form Age UK, a charitable company limited by guarantee and registered in England: registered office address 207-221 Pentonville Road, London, N1 9UZ, company number 6825798, registered charity number 1128267. Age Concern and Help the Aged are brands of Age UK. The three national Age Concerns in Scotland, Northern Ireland and Wales have also merged with Help the Aged in these nations to form three registered charities: Age Scotland, Age NI, Age Cymru.