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Social Inequalities and Care Poverty

Care poverty has serious consequences that threaten the health and well-being of older people, bringing about unnecessary and untimely admissions to hospitals or long-term residential care. This imposes major economic and human costs on the older population, their families, and society at large. As with the prevalence of care poverty, its consequences are not distributed equally across all older people. Instead, they are concentrated within certain population groups, reflecting and reproducing existing social inequalities. Care poverty is thoroughly embedded in its social and structural contexts—and thus in the inequalities prevalent in those contexts.

A key rationale for introducing the concept of care poverty to this book is the disregard that gerontological research into unmet needs has shown for social inequalities. Income level, education, age, gender, and ethnicity are regularly included as background factors in these studies, and their statistical associations with the prevalence of unmet needs are analysed and routinely reported. But the findings of those studies have not been collected together or discussed in the light of research on social inequalities.

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This chapter aims to open such a discussion by summarising available knowledge of the connections between care poverty and key dimensions of social inequalities. It begins with a discussion of income inequalities and educational disparities before moving on to gender inequalities and ethnic and regional disparities. The chapter concludes by considering whether care poverty can be seen as a dimension of inequality in its own right.

Income Inequalities and Care Poverty

It would not be surprising if income level were connected to access to care and support. Care is a very labour-intensive activity based most often on one-to-one interactions. Though salary levels in care work are generally low, care services are still expensive to purchase—especially if the user is left to cover the costs alone, without public subvention. Even when public funding is available to share the costs, user co-payments can still be high. This is particularly true for residential care, but also for home care (Huber et al., 2009; Rodrigues & Schmidt, 2010).

Before the introduction of the Long-Term Care Insurance (LTCI) programme in 2000 in Japan, for example, only very high-income individuals and families were able to bear the costs of intensive home care (Izuhara, 2003, pp. 403–404). The new programme considerably expanded the size of the group of older persons who could afford these services. Still, Izuhara (2003, p. 408) concludes that the LTCI scheme tends to benefit middle- to high-income households, putting pressure on lower-income households.

Different long-term care systems clearly create dissimilar conditions for how older people from different income groups can access assistance and support. The design of co-payments for formal care also has a major effect on the financial burden of different income groups (Wouterse et al., 2021)—and thus on the affordability of these services.

Researchers have started to examine whether income inequalities affect access to care for older people. Rodrigues and Schmidt (2010) analysed the use of home care services in the 65+ age group for different income groups in nine European countries, observing substantial variations. In

Germany, Austria, and Italy, the quintile with the highest incomes was shown to use home care considerably more often than the lowest quintile. However, the situation was the opposite in Sweden, Denmark, France, and the Netherlands. In Spain and Belgium, both income groups used home care in an equal manner. Albertini and Pavolini (2017) also compared the situation in Germany, Italy, Denmark, and France, finding very similar results. Older people with low incomes seem thus to be disadvantaged in terms of their access to formal home care, especially in countries that are based on cash-for-care allowances often used to pay for informal or migrant carers. The situation seems less problematic in nations where the focus is instead on professional care service provision as it 'allows for de facto targeting of low-income groups or of those more in need of care' (Rodrigues & Schmidt, 2010, p. 14).

Broese van Groenou et al. (2006) observed a socio-economic gradient in the use of formal care in the Netherlands, Belgium, the United Kingdom, and Italy. In all of these countries, it was older people in low-level socio-economic groups who used formal long-term care most often. In the case of informal care, lower socio-economic groups received noticeably more help from informal sources. The authors explain the higher use of formal and informal care among older people in lower-level socio-economic groups by their relatively poor health and lack of social and material resources.

Health inequalities further weaken the position of older people with low incomes. As the research on health disparities has clearly shown, there is a distinctive socio-economic gradient in health status (e.g., Siegrist & Marmot, 2006). Health inequalities do not vanish with ageing, either. They remain in effect even though higher mortality means that a disproportionate number of those from lower-income groups never even reach old age (e.g., Bosworth, 2018; Enroth et al., 2019). Poor health and subsequently greater care needs are a typical characteristic of low-income older people (Broese van Groenou et al., 2006). This means these groups not only have fewer financial resources to pay for care but also have more care needs to start with.

Hence, there are multiple reasons to expect a close association between income inequalities and care poverty. But does the literature actually confirm such a connection? There is ample research on the topic as almost all

studies of unmet long-term care needs include income levels in their analyses. The results, however, are less clear than what might be anticipated (Tables 5.1–5.7). While a straightforward connection between income level and the prevalence of unmet needs could be expected, the results vary across countries and care poverty domains. They also depend on whether the studies used the absolute or relative approach to measurement.

Much of the ambivalence concerns personal care poverty. In the case of absolute personal care poverty, four of the five reviewed studies failed to find a significant association between income level and unmet needs (Table 5.1). These studies came from the United States, the United Kingdom, India, and Malaysia. The evidence here is thus based on individual studies from four different countries. Firm conclusions might better be avoided, especially as Ashokkumar et al. (2012) did not run a multivariate analysis, the sample of LaPlante et al. (2004) consisted mostly of people younger than 65, and Zhu and Österle (2017) still found a significant association in China.

In the case of relative personal care poverty, a slight majority of studies identified income as accounting for unmet needs (Table 5.2). From Spain, both studies agree on this connection. From China, only the study by Gu and Vlosky (2008) did not confirm it. On the other hand, Desai et al. (2001) were the only ones who found a significant association between income level and unmet needs in the United States—but then, theirs was the sole American study that used a sample consisting exclusively of older people. In our lone study from Finland, people with low incomes were no more likely to have their personal care needs uncovered. When trying to understand these partly contradictory findings, it is necessary to take into account care policy as a mediating factor between income levels and care poverty. In Spain (in the 1990s) and China, formal care used to be very limited. In the United States and Finland, the respective Medicaid programme and the Nordic welfare model made formal care available to many older people with low incomes.

In terms of practical care poverty, the evidence is limited but unanimous nonetheless: for all three studies, people with low incomes were more likely to have their needs unmet (Table 5.3). Still, the studies come from different decades and different countries. As assistance with

household tasks and other practical care needs is rarely provided publicly but instead usually purchased out of pocket, it is hardly surprising that older people with higher incomes are less likely to experience practical care poverty.

Among those studies that used the absolute measurement approach but failed to distinguish between unmet personal and practical care needs, regression analyses from the United States, Slovenia, and China did not identify income level as a predictor of unmet needs. In contrast, a study from France and Ireland showed a significant association (Table 5.4). But for studies using the relative approach, only one American study did not confirm the association; other analyses show it to be significant (Table 5.5). These findings are difficult to interpret because the studies mix together two very different domains for care needs. Informal care probably plays a major role here, providing much practical help and—especially in countries with limited formal care provisions—also personal care.

Socio-emotional care poverty, measured here by loneliness, shows consistent results. However, only two out of the four international studies reviewed included income level in their independent variables (Table 5.6). Both studies confirmed that loneliness is significantly associated with low income levels in Europe. However, the studies did not provide results at the level of individual countries.

The influence of income level is observed not only for the rates of care poverty, but also for its consequences. In the United States, Desai et al. (2001) report that an annual income under $20,000 almost triples the likelihood of adverse consequences among those with unmet needs. The importance of low incomes to adverse outcomes is further confirmed by Freedman and Spillman (2014). As well, Allen et al. (2014) noticed that such consequences were more common among 'dual eligibles' than other Medicare users; having passed the strict Medicaid means test, the first group has lower incomes than the second group. A study from China observed that low economic status is a risk factor for mortality among those with unmet care needs (Zhen et al., 2015). The current evidence thus suggests that, even though a low level of income does not always predict care poverty, financial hardship is associated with the emergence of negative consequences among those who are in care poverty.

Overall, it seems that studies using the absolute approach only rarely show income level as a significant factor of unmet needs. In contrast, this is more common among studies using the relative measurement approach. Evidence concerning personal care poverty is partly contradictory because a low income level seems to be a risk factor for unmet personal care needs in some, but not in all, countries. At the same time, low income is more systematically associated with practical care poverty, and the same goes for socio-emotional care poverty. The total picture is not as clear-cut as what might be expected: a low income level is not always, in every domain and all contexts, connected with care poverty. There seem to be other factors involved, including the care policy model. But then, this conclusion supports one of the key arguments of this book: care poverty is not only about poverty and a lack of material resources. Instead, it is a much more complicated phenomenon.

Educational Inequalities and Care Poverty

Health research has discerned that indicators of socio-economic status are not interchangeable as they each yield distinct results. Different indicators are understood to capture different aspects of overall health risk (Duncan et al., 2002). Research into care poverty, too, requires more than one socio-economic indicator.

Within the context of care poverty, educational level can be considered a relevant socio-economic indicator. In order to receive public formal care, the older person (or their family) must know about available services and benefits, their eligibility criteria, and how to apply for them. Applying for services includes filling out forms, which are nowadays increasingly found online, and interacting with social or health care professionals. Purchasing for-profit care services can also be a complex process involving many of the same elements. All of this requires access to information and skills acquired from education. Albertini and Pavolini (2017, p. 511) conclude that a higher educational level can be expected to lead to a greater chance of accessing public care as the procedures for accessing formal care are nowadays complex—particularly when it comes to needs- or means-testing.

It is rather surprising, then, that studies of unmet needs do not show education level playing an actual role in care poverty. For the analyses of absolute personal care poverty, Zhu and Österle (2017) are the lone study to recognise educational level as a significant factor (Table 5.1). In the case of relative personal care poverty, Desai et al. (2001) in the United States and Rogero-García and Ahmed-Mohamed (2014) in Spain reported a correlation between educational level and unmet needs (Table 5.2). However, Liu et al. (2012) from Taiwan were the only ones who identified a significant association in their regression analysis.

In the case of practical care poverty, only Otero et al. (2003) in Spain found evidence of low levels of education being related to inadequate coverage for some—but even here, not all—IADL needs (Table 5.3). Other studies did not recognise a significant association. Among those studies that combine personal and practical care needs, Gibson and Verma (2006) in the United States and Rogero-García and Ahmed-Mohamed (2011) in Spain both noticed a correlation between unmet need and education levels. Still, this connection was confirmed only by a regression analysis from China (Tables 5.4 and 5.5).

In terms of socio-emotional care poverty, three out of the four comparative loneliness studies under review included educational level among their independent variables (Table 5.6). One showed loneliness to be inversely related to educational level, while another failed to find such an association. The ambivalence of European-level findings as a whole is made understandable by the third study, which showed a low educational level being associated with loneliness in four countries (France, Germany, Israel, and Spain) but not in seven (Austria, Belgium, Denmark, Greece, Italy, the Netherlands, or Sweden). Hence, national contexts were proven to affect the connection.

In general, most evidence fails to prove that a low level of education can predict care poverty. This is surprising because a high level of education might be expected to confer advantages in access to care. Still, it should be recalled that care poverty is not just about formal care. In principle, it is always possible that informal care is compensating for the lack or inadequacy of formal care. For example, there is evidence that older people with a low level of education in Sweden use informal care to fill the gap between their care needs and available formal services (Szebehely

& Trydegård, 2012). Further research is needed to determine whether this is true on a larger scale and across countries. Educational inequalities exist in care, but when looking at care poverty, their explanatory power appears more limited than expected.

Gender Inequalities and Care Poverty

Despite societal movement towards more gender equality, women are still disadvantaged in current societies in many ways. They earn lower salaries than men and experience career breaks due to childbirth and childcare. They struggle with glass ceilings, gender stereotypes, and gender-segregated labour markets (e.g., Scott et al., 2012; Daly, 2020). Within families, women still perform the overwhelming part of housework and caring. In the words of Fiona Williams (2021, p. 42), 'women's inequalities, at work and in the household, relate to the (unpaid) care domestic responsibilities they carry'. Feminist scholarship shows that gender inequalities permeate societies and manifest themselves in multiple ways in both the private and the public sphere.

Care is one of the most thoroughly gendered social phenomena (Leira & Saraceno, 2002). Care work is performed overwhelmingly by women in both the informal and formal sectors. It is middle-aged women, in particular, whose opportunities to fully participate in the labour market are contingent to their informal care responsibilities and whether formal long-term care services are available to share their care work (Kröger & Yeandle, 2013). At the same time, due to the fact that men have a shorter lifespan, the majority of people in need of formal care in old age are women (EIGE, 2019). Daly and Rake (2003, pp. 68–69) summarise the situation by stating that '[c]are is thus heavily implicated in gender inequality and patterns of individual and family well-being, just as variations in welfare state policy are systematically associated with variations in the situation of women and men'. So, care is fundamentally gendered but is care poverty a gender-specific issue, as well? In other words, are women more likely to have unmet care needs?

For personal care poverty, regressions show a significant association between gender and unmet personal care needs in Spain and Malaysia.

However, analyses from the United States and Finland fail to confirm this (Tables 5.1 and 5.2). Another Spanish study failed to confirm the association, as well. In the United Kingdom, Brimblecombe et al. (2017) and Dunatchik et al. (2016) did not identify gender as a predictor of unmet needs. In contrast, Vlachantoni (2019) did—but in her study, it was actually men who were more likely to have unmet needs. In China, Gu and Vlosky (2008) did not report gender as a factor for unmet needs. Yet for the same country, results from Peng et al. (2015) and Zhu (2015) show the opposite—but only in a rural context. For cities, there were no statistical differences between men and women; in the countryside, gender differences existed with men in both studies more likely to have unmet needs. Using self-reporting to measure unmet needs, Peng et al. (2015) suggest that rural women may have lower expectations than men—which could explain why men are more often unsatisfied with the support they receive. But in general, gender typically fails to predict personal care poverty. When it does, it could be that men are more prone to have unmet needs.

For practical care poverty, the evidence is scarce. Only one of the five studies under review identifies gender as a significant factor of unmet needs (Table 5.3). Analyses from the United States, Spain, and Finland all found gender to be non-significant. Only British research by Vlachantoni (2019) reports a significant association between gender and unmet practical care needs. But once again, regressions show older men facing a heightened risk—not older women.

Studies that fail to distinguish personal from practical care needs and employ the absolute approach to measurement report similar kinds of results (Table 5.4). Only two studies (from France/Ireland and China) identify gender as a significant factor. As before, it is men who were more likely to have unmet care needs. Other studies from the United States, India, the United Kingdom, Sweden, and Slovenia all failed to identify gender as statistically significant.

When studies use the relative approach to measure unmet personal-practical care needs, there is more evidence of an association (Table 5.5). Lima and Allen (2001) in the United States, Lévesque et al. (2004) in Canada, Rogero-García and Ahmed-Mohamed (2011) in Spain, and Wilkinson-Meyers et al. (2014) in New Zealand all found regression

results showing women as significantly more likely to have unmet care needs. On the other hand, analyses from Gibson and Verma (2006) and Schure et al. (2015) in the United States, Busque and Légaré (2012) in Canada, and Davin et al. (2006) in France did not show a significant relation. In this case, none of the studies showed men as more at risk than women. Overall, for the first time, a slight majority of analyses identified gender as a significant factor of care poverty.

Finally, when it comes to socio-emotional care poverty, only two out of the four comparative studies under review analysed the connection between gender and loneliness (Table 5.6). A study of 14 countries by Fokkema et al. (2012) identified gender as a significant factor of loneliness, while results from Sundström et al. (2009) were more mixed. The latter study reported women as more likely to experience loneliness in three countries (France, Greece, and Spain) but not in eight countries (Austria, Belgium, Denmark, Germany, Israel, Italy, the Netherlands, and Sweden).

When it comes to whether gender affects the consequences of care poverty, the evidence remains very thin. In one American study on adverse outcomes, gender did not have a significant impact (Desai et al., 2001). Instead, Zhen et al. (2015) observed that women in Chinese cities have a heightened mortality risk due to unmet needs.

Gender inequalities are widespread in society, disadvantaging women in many ways. Care, in particular, is a thoroughly gendered field. At the same time, studies of unmet needs do not show women being systematically overrepresented among the population of older people living in care poverty. There are even studies that show men as more likely to have unmet needs. This is surprising and unexpected. However, the results seem to depend at least partly on national context. On the one hand, most Spanish studies show older women as more likely to have unmet needs; single studies from Malaysia and New Zealand found a similar result. On the other hand, most American studies do not show gender as a factor of unmet needs; single studies from Finland, India, Slovenia, and Sweden point to a similar situation. Canada has mixed results. Studies from the United Kingdom, China, France, and Ireland show men at greater risk for care poverty, although not all studies from these countries find a statistically significant association between gender and unmet needs.

As care poverty depends on both informal and formal care, gender differences can mean inequalities in access to either or both of these sources of care. Accordingly, lack of a gender difference can mean either equality in access to both or that another source is compensating for an unequal lack of access to a particular source of care. The available empirical evidence does not make it possible to draw firmer conclusions on the issue. Many questions are still left unanswered, so there is a clear need for more thorough research on the connections between care poverty and gender.

Racial and Ethnic Inequalities and Care Poverty

Another source of major social inequality is ethnicity. For many migrant and ethnic minority groups, discrimination, social disadvantage, and racism are regular experiences (e.g., Alexander & Byrne, 2020). Ethnic residential segregation has been a key part of the development of social inequality (Nazroo & Williams, 2006). In Europe and North America, non-white groups are regularly disadvantaged by differences between the opportunities available to ethnic majority and minority populations. Disparities between ethnic majority and minority groups also exist in regions such as Asia and Africa.

There is firm evidence also for persistent health inequalities grounded in ethnicity, showing clear morbidity and mortality differences across ethnic groups (Nazroo & Williams, 2006; Ingleby, 2012). Experiencing racial harassment and discrimination is observed to contribute to ethnic inequalities in health; health inequalities are also connected to the overall low socio-economic position of many minority groups (Nazroo & Williams, 2006). In Britain, however, older people from ethnic minorities report poorer health status even after controlling for social and economic disadvantages (Evandrou et al., 2016). Similar observations have been made in the Netherlands, Denmark, and Sweden (Lorant & Dauvrin, 2012).

Ethnicity matters not only for health status, but also in access to health care. In the United States, more than half of the country's uninsured citizens are from ethnic and racial minorities even though these groups make only one-third of the total population (Lancet, 2011). In Britain, research

shows that ethnic inequalities in experiences with health care are substantial: despite the universal nature of the National Health Service (NHS), ethnic minority people are, for example, more likely to be dissatisfied with the health care they receive, to wait longer for an appointment, and to face language barriers during the consultation (Chouhan & Nazroo, 2020). The total picture is complex, however, as there are many variations across specific ethnic groups and health conditions as well as across countries.

Concerning unmet health care needs, Wu et al. (2005) did not find them to be linked with immigrant status in Canada, but in the United States, there is considerable evidence for ethnic disparities in the use of health care. African Americans and Latinos, in particular, use health services at lower rates when compared to white Americans (Ashton et al., 2003). One American study observed that 25–31% of respondents from different ethnic minority groups had experienced discrimination in health care and that this experience was associated with a more than twofold likelihood of having unmet health care needs (Benjamins & Whitman, 2014).

Unmet health care needs thus have an ethnic gradient, but what about unmet long-term care needs? Are there ethnic or racial inequalities in care poverty? Once again, the issue is studied predominantly in the United States, and once more, the results are mixed. On the one hand, several American studies have found no significant association. But on the other hand, a number of American studies have identified ethnicity as a factor of unmet care needs. Kennedy (2001) observed that the odds of unmet needs among Hispanics were 50% higher and among blacks 90% higher than among whites. Newcomer et al. (2005) reported whites as 33% less likely than other racial groups to have unmet care needs. Lima and Allen's (2001) multinomial regressions show blacks and Hispanics as 38% more likely to have inadequate help than whites. But at the same time, studies such as Allen and Mor (1997) and LaPlante et al. (2004) found no apparent link between ethnicity and unmet care needs. In terms of the consequences of care poverty, Desai et al. (2001) did not identify ethnicity as a predictor of adverse outcomes. In contrast, Freedman and Spillman (2014) identified non-white groups of older people as significantly more likely to experience adverse consequences.

Studies from other countries on ethnic inequalities in the context of unmet needs are rare. In China, Gu and Vlosky (2008) report the majority Han population as significantly (32%) less likely to have unmet needs than non-Han groups. However, Zhu (2015) did not find such a difference. In Malaysia, Momtaz et al. (2012) identified unmet needs as more common among Malay than non-Malay populations, but their regression analysis did not confirm the finding. In New Zealand, Wilkinson-Meyers et al. (2014) could not identify a significant difference in unmet care needs between Māori and non-Māori groups. Self-reporting in Britain showed that 45% of white and 65% of black and other ethnic minority older people had unmet needs, but the difference remained statistically insignificant (Brimblecombe et al., 2017).

Thus the evidence from the United States remains ambiguous, and the results from other countries are too patchy and contradictory to draw any conclusions. There is no consensus in the literature on whether ethnicity and unmet needs are significantly related or whether ethnicity predicts adverse consequences among people with unmet needs. The number of American studies that failed to identify racial or ethnic disparities in unmet needs is surprising. The Medicaid programme could be an intermediate variable that explains the surprisingly weak link between ethnicity and care poverty in the United States. As non-white groups are overrepresented among those who fill the strict Medicaid eligibility criteria, the programme serves racial minorities, in particular, obviously reducing their care poverty.

At the same time, several studies still do show a significant gradient in care poverty: whites are more unlikely to have unmet needs or their negative consequences than blacks and Hispanics. A recent study by Berridge and Mor (2018) discusses these contradictions. In their unadjusted models, older black adults were more likely than whites to experience an adverse consequence of unmet need. However, this difference disappeared in adjusted models. They came to the interesting conclusion that while there are apparent absolute racial inequalities in unmet needs and their consequences, controlling other variables (such as health and functional status, living arrangement, and marital status) 'adjusts away' the effect of race, per se.

Regional Inequalities and Care Poverty

Regional inequalities influence people's lives, as well. Living conditions differ across geographical areas and so does the availability of public and private services (Cörvers & Mayhew, 2021). Formal long-term care services are no exception to this rule as they are less available in rural areas, even though several welfare states have tried to even out regional differences through central grant systems or other measures (e.g., Kröger, 2011; Henning-Smith et al., 2019). Yet large variations in service provisions remain, and rural residents face several barriers to accessing formal care, linked to, for example, transportation, workforce shortages, and financial constraints (Henning-Smith, 2021). Coburn (2002, p. 67) concludes that 'despite a greater need, rural elders are less likely to have their health and long-term care needs met because of problems in the availability of health and social services and the obstacles to delivering services in rural areas, including low population densities, limited transportation, and longer travel distances'.

At the same time, informal support networks are often thought to be tighter in the rural environment, as it is not rare to have family members living in the same village or town. Accordingly, a study from Sweden reports that rural older people were almost three times more likely to receive informal care than people living in urban environments (Nordberg, 2007). However, Glasgow (2000) states that although older people in American rural settings are more likely to have a spouse and more children, urban older people are more likely to co-reside with or have adult children living by. A study from rural Belgium also found that informal care depends on spatial context and cannot be guaranteed everywhere (Volckaert et al., 2020).

Regional variations in the availability of care are not only about the rural-urban divide but also about differences between different regional units—between municipalities, counties, regions, provinces, and states (e.g., Hébert et al., 2019; Duell et al., 2020). Liu et al. (2012, p. 164) listed the backgrounds for these variations:

> Local diversities are manifested in long-term care policies in general and in home care provisions in particular, thanks to differences among areas' political cultures, demographic make-ups, care resources, efficiencies in civil services, grants from the central government, budgets, and amount of welfare handouts.

The specific characteristics of regional units, which includes their economic, political, and population structures, thus contribute to the emergence of regional differences. Overall, the more administrative and political autonomy that subnational units have, the greater the difference one might expect across their service provisions (Kröger, 1997, 2011). The opposite also holds true: the more centralised that policy-making and implementation are in a country, the more uniformity across regions one might expect to find in its care service system.

What does the available evidence say about regional inequalities in care poverty? Not very much, as this has clearly not been a key focus of unmet need research (Tables 5.1–5.7). Single studies from France and New Zealand failed to demonstrate a significant rural-urban difference, while studies from Slovenia and Taiwan observed unmet needs as more prevalent in rural areas. In China, Gu and Vlosky (2008) reported that living in an urban area reduces the likelihood of unmet needs by 23%. In contrast, Gibson and Verma (2006) in the United States and Rogero-García and Ahmed-Mohamed (2011) in Spain found a higher probability of unmet needs in urban over rural areas.

In Finland, our study compared unmet care needs in two cities and found no significant differences in their care poverty rates (Kröger et al., 2019). As both of these cities also have large rural areas, we further analysed whether the prevalence of unmet needs differs in centres and other areas of these cities. For practical care poverty, no regional differences were found. But for personal care poverty, living outside the city centre increased the care poverty risk by 89%. This was understood to primarily result from the greater availability of formal care services in city centres.

In terms of the negative consequences of unmet needs, an American analysis found practically no differences between rural and urban areas (Henning-Smith et al., 2019). For their part, Hu and Wang (2019) reported unmet needs as connected to a significant increase in the risk for

depression in rural, but not urban, areas of China. Yet Zhen et al. (2015) observed that for China, unmet needs brought a significant increase in mortality only in urban areas.

Aside from urban-rural comparisons, some research looks at unmet care needs in different parts of the country. Gibson and Verma (2006) discerned a higher prevalence of unmet needs in eastern and southern parts of the United States than in the Midwest. As well, Davey et al. (2013) found that older people were less likely to report an unmet need when they lived in states where a higher proportion of older adults lived in institutional care (many of which were located in the Midwest). These two studies are thus largely consistent with each other.

Gu and Vlosky (2008) found that living in any area of China other than in the north considerably increased the risk of unmet needs (by 62–71%). Busque and Légaré (2012) observed regional variations in Canada, with Quebec and British Columbia showing a significantly higher prevalence of unmet needs than Ontario, the Atlantic provinces, or the Prairie Provinces. When discussing these differences, they refer to home care expenditures clearly below the general Canadian level in the former two provinces. Liu et al. (2012) explained the differences they uncovered in unmet care needs across 23 Taiwanese counties and municipalities in the same way: in certain areas, higher social welfare expenditures (among other area-level factors) led to lower levels of unmet needs.

The body of unmet need literature does not offer fully consistent results on regional inequalities in care poverty. However, one issue seems to be clear: there are major differences in care poverty rates across different areas, at least in geographically large countries such as the United States, Canada, and China. Typically, researchers interpret these variations as the outcome of dissimilar resources for formal care services. The evidence also demonstrates some inequalities between rural and urban areas. But no matter whether it is rural areas (as in Slovenia and Taiwan) or urban centres (as in Spain and the United States) that are disadvantaged, this seems to depend on the nation and sometimes on the exact issue being studied.

Conclusions

When it comes to links between care poverty and different kinds of social inequalities, findings from available literature are partly inconsistent. Although care is a gendered activity to its core, women do not appear to be at a systematically higher risk for care poverty than men. Yet the clear majority of older people in care poverty are nonetheless female, due to their larger share of the oldest age groups.

Indicators of socio-economic status give dissimilar results, as educational background seldom predicts unmet needs while income level proves to be a significant factor more often. However, the evidence is also mixed concerning the significance of income levels; results seem to depend on the care poverty domain, the country, and the methods used to measure unmet needs.

Some studies report racial and ethnic inequalities in unmet needs, while others fail to find a statistically significant association. But when significance is found, it is almost always ethnic minority groups who are disadvantaged in comparison to the majority. Rural areas seem to be at specific risk for care poverty, though some studies show urban centres as having even higher rates. Large countries, at least, also show major variations across different areas. Higher rates of care poverty typically occur in economically weaker areas with limited provisions for formal care.

There are distinct knowledge gaps regarding how different dimensions of social inequalities are connected to care poverty. The evidence generally suggests that low incomes, ethnic disparities, and regional differences in particular increase the risk of care poverty in many countries. But at the same time, there are clearly other factors at play. So far, interactions between these different forces are not well understood. It seems important to learn why gender and educational level do not generally predict care poverty in statistical analyses. The available evidence does not allow for a full comparison of the three care poverty domains, either. The results point to certain directions, such as by suggesting that income level is closely connected to practical care poverty and that the impact of gender on personal

care poverty is context dependent, but these issues require systematic analysis. Relationships between social inequalities and informal and formal care are another issue requiring further examination: how do social inequalities affect access to formal care and informal care—and under which conditions does the formal-informal interplay lead to care poverty?

The final question regarding social inequalities and care poverty is whether care poverty could and should be seen as a dimension of inequality in itself. Though poverty can sometimes predict care poverty, this is not always the case. There are many other factors that also affect the prevalence of unmet needs. Moreover, none of these factors fully explain the phenomenon of inadequate care. Other dimensions of social inequality affect care poverty, but this does not mean that care poverty can be reduced back to those dimensions. Whether or not individual care needs are met is a social issue in its own right. When some people receive adequate care while others do not, a new type of inequality emerges. This book thus understands care poverty as a dimension of inequality on its own.

References

Albertini, M., & Pavolini, E. (2017). Unequal inequalities: The stratification of the use of formal care among older Europeans. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 72*(3), 510–521. https://doi.org/10.1093/geronb/gbv038

Alexander, C., & Byrne, B. (2020). Introduction. In B. Byrne, C. Alexander, O. Khan, J. Nazroo, & W. Shankley (Eds.), *Ethnicity, race and inequality in the UK: State of the nation* (pp. 1–13). Policy Press. https://doi.org/10.2307/j.ctv14t47tm.6

Allen, S., & Mor, V. (1997). The prevalence and consequences of unmet need: Contrasts between older and younger adults with disability. *Medical Care, 35*(11), 1132–1148. https://doi.org/10.1097/00005650-199711000-00005

Allen, S. M., Piette, E. R., & Mor, V. (2014). The adverse consequences of unmet need among older persons living in the community: Dual-eligible versus Medicare-only beneficiaries. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 69*(7), S51–S58. https://doi.org/10.1093/geronb/gbu124

Ashokkumar, T., Chacko, T. V., & Munuswamy, S. (2012). Physical disabilities among the rural elderly: Identifying surrogate markers of unmet disability care needs. *International Journal of Tropical Medicine, 7*(1), 38–41. https://doi.org/10.3923/ijtmed.2012.38.41

Ashton, C. M., Haidet, P., Paterniti, D. A., Collins, T. C., Gordon, H. S., O'Malley, K., Petersen, L. A., Sharf, B. F., Suarez-Almazor, M. E., Wray, N. P., & Street, R. L., Jr. (2003). Racial and ethnic disparities in the use of health services: Bias, preferences, or poor communication? *Journal of General Internal Medicine, 18*(2), 146–152. https://doi.org/10.1046/j.1525-1497.2003.20532.x

Benjamins, M. R., & Whitman, S. (2014). Relationships between discrimination in health care and health care outcomes among four race/ethnic groups. *Journal of Behavioral Medicine, 37*(3), 402–413. https://doi.org/10.1007/s10865-013-9496-7

Berridge, C., & Mor, V. (2018). Disparities in the prevalence of unmet needs and their consequences among black and white older adults. *Journal of Aging and Health, 30*(9), 1427–1449. https://doi.org/10.1177/0898264317721347

Bosworth, B. (2018). Increasing disparities in mortality by socioeconomic status. *Annual Review of Public Health, 39*, 237–251. https://doi.org/10.1146/annurev-publhealth-040617-014615

Brimblecombe, N., Piccard, L., King, D., & Knapp, M. (2017). Perceptions of unmet needs for community social care services in England: A comparison of working carers and the people they care for. *Health and Social Care in the Community, 25*(2), 435–446. https://doi.org/10.1111/hsc.12323

Broese van Groenou, M., Glaser, K., Tomassini, C., & Jacobs, T. (2006). Socio-economic status differences in older people's use of informal and formal help: A comparison of four European countries. *Ageing & Society, 26*(5), 745–766. https://doi.org/10.1017/S0144686X06005241

Busque, M.-A., & Légaré, J. (2012). Les besoins non comblés de services à domicile chez les aînés canadiens. *Canadian Journal on Ageing/La Revue canadienne du vieillissement, 31*(3), 271–283. https://doi.org/10.1017/S0714980812000189

Chouhan, K., & Nazroo, J. (2020). Health inequalities. In B. Byrne, C. Alexander, O. Khan, J. Nazroo, & W. Shankley (Eds.), *Ethnicity, race and inequality in the UK: State of the nation* (pp. 73–92). Policy Press. https://doi.org/10.2307/j.ctv14t47tm.10

Coburn, A. F. (2002). Rural long-term care: What do we need to know to improve policy and programs? *The Journal of Rural Health, 18*(5), 256–269. https://doi.org/10.1111/j.1748-0361.2002.tb00935.x

Cörvers, F., & Mayhew, K. (2021). Regional inequalities: Causes and cures. *Oxford Review of Economic Policy, 37*(1), 1–16. https://doi.org/10.1093/oxrep/graa067

Daly, M. (2020). *Gender inequality and welfare states in Europe*. Edward Elgar. https://doi.org/10.4337/9781788111263

Daly, M., & Rake, K. (2003). *Gender and the welfare state: Care, work and welfare in europe and the USA*. Polity Press.

Davey, A., Takagi, E., Sundström, G., & Malmberg, B. (2013). (In)formal support and unmet needs in the national long-term care survey. *Journal of Comparative Family Studies, 44*(4), 437–453. https://doi.org/10.3138/jcfs.44.4.437

Davin, B., Joutard, X., Moatti, J.-P., Paraponaris, A., & Verger, P. (2006). Besoins et insuffisance d'aide humaine aux personnes âgées à domicile: une approche à partir de l'enquête «Handicaps, incapacités, dépendance». *Sciences Sociales et Santé, 24*(3), 59–93. https://doi.org/10.3406/sosan.2006.1689

Desai, M. M., Lentzner, H. R., & Weeks, J. D. (2001). Unmet need for personal assistance with activities of daily living among older adults. *The Gerontologist, 41*(1), 82–88. https://doi.org/10.1093/geront/41.1.82

Duell, D., van Oort, R., Lindeboom, M., Koolman, X., & Portrait, F. (2020). Regional variation in public long-term home care: Regional differences in the Netherlands and the role of patient experiences. *Nordic Journal of Health Economics, 8*(1), 87–113. https://doi.org/10.5617/njhe.6670

Dunatchik, A., Icardi, R., Roberts, C., & Blake, M. (2016). *Predicting unmet social care needs and links with well-being: Findings from the secondary analysis*. Ipsos MORI.

Duncan, G. J., Daly, M. C., McDonough, P., & Williams, D. R. (2002). Optimal indicators of socioeconomic status for health research. *American Journal of Public Health, 92*(7), 1151–1157. https://doi.org/10.2105/ajph.92.7.1151

EIGE. (2019). *Gender equality index 2019*. European Institute for Gender Equality. https://doi.org/10.2839/852588

Enroth, L., Veenstra, M., Aartsen, M., Kjær, A. A., Nilsson, C. J., & Fors, S. (2019). Are there educational disparities in health and functioning among the oldest old? Evidence from the Nordic countries. *European Journal of Ageing, 16*(4), 415–424. https://doi.org/10.1007/s10433-019-00517-x

Evandrou, M., Falkingham, J., & Feng, Z. (2016). Ethnic inequalities in limiting health and self-reported health in later life revisited. *Journal*

of Epidemiology & Community Health, 70(7), 653–662. https://doi.org/10.1136/jech-2015-206074

Fokkema, T., De Jong Gierveld, J., & Dykstra, P. A. (2012). Cross-national differences in older adult loneliness. *The Journal of Psychology, 146*(1–2), 201–228. https://doi.org/10.1080/00223980.2011.631612

Freedman, V. A., & Spillman, B. C. (2014). Disability and care needs among older Americans. *The Milbank Quarterly, 92*(3), 509–541. https://doi.org/10.1111/1468-0009.12076

Gibson, M. J., & Verma, S. K. (2006). *Just getting by: Unmet need for personal assistance services among persons 50 or older with disabilities*. AARP.

Glasgow, N. (2000). Rural/urban patterns of aging and caregiving in the United States. *Journal of Family Issues, 21*(5), 611–631. https://doi.org/10.1177/019251300021005005

Gu, D., & Vlosky, D. (2008). Long-term care needs and related issues in China. In J. B. Garner & T. C. Christiansen (Eds.), *Social sciences in health care and medicine* (pp. 52–84). Nova Science Publishers.

Hébert, P. C., Morinville, A., Costa, A., Heckman, G., & Hirdes, J. (2019). Regional variations of care in home care and long-term care: A retrospective cohort study. *CMAJ Open, 7*(2), E341–E350. https://doi.org/10.9778/cmajo.20180086

Henning-Smith, C. (2021). Long-term care. In L. W. Kaye (Ed.), *Handbook of rural aging* (pp. 271–274). Routledge. https://doi.org/10.4324/9781003128267-50

Henning-Smith, C., Wu, Z., & Lahr, M. (2019). *Unmet need for personal care assistance among rural and urban older adults*. Rural Health Research Center Policy Brief. University of Minnesota. Retrieved August 21, 2021, from https://rhrc.umn.edu/publication/unmet-need-for-personal-care-assistance-among-rural-and-urban-older-adults/

Hu, B., & Wang, J. (2019). Unmet long-term care needs and depression: The double disadvantage of community-dwelling older people in rural China. *Health and Social Care in the Community, 27*(1), 126–138. https://doi.org/10.1111/hsc.12630

Huber, M., Rodrigues, R., Hoffmann, F., Gasior, K., & Marin, B. (2009). *Facts and figures on long-term care: Europe and North America*. European Centre for Social Welfare Policy and Research.

Ingleby, D. (2012). Introduction by series editor. In D. Ingleby, A. Krasnik, V. Lorant, & O. Razum (Eds.), *Health inequalities and risk factors among migrants and ethnic minorities* (Vol. 1, pp. 9–21). Garant.

Izuhara, M. (2003). Social inequality under a new social contract: Long-term care in Japan. *Social Policy & Administration, 37*(4), 395–410. https://doi.org/10.1111/1467-9515.00347

Kennedy, J. (2001). Unmet and undermet need for activities of daily living and instrumental activities of daily living assistance among adults with disabilities: Estimates from the 1994 and 1995 disability follow-back surveys. *Medical Care, 39*(12), 1305–1312. https://doi.org/10.1097/00005650-200112000-00006

Kröger, T. (1997). Local government in Scandinavia: Autonomous or integrated into the welfare state? In J. Sipilä (Ed.), *Social care services: The key to the Scandinavian welfare model* (pp. 95–108). Avebury. https://doi.org/10.4324/9780429437519

Kröger, T. (2011). Retuning the Nordic welfare municipality: Central regulation of social care under change in Finland. *International Journal of Sociology and Social Policy, 31*(3/4), 148–159. https://doi.org/10.1108/01443331111120591

Kröger, T., Mathew Puthenparambil, J., & Van Aerschot, L. (2019). Care poverty: Unmet care needs in a Nordic welfare state. *International Journal of Care and Caring, 3*(4), 485–500. https://doi.org/10.1332/239788219X15641291564296

Kröger, T., & Yeandle, S. (Eds.). (2013). *Combining paid work and family care: Policies and experiences in international perspective*. Policy Press. https://doi.org/10.1332/policypress/9781447306818.001.0001

Lancet. (2011). Editorial: Ending racial and ethnic health disparities in the USA. *The Lancet, 377*(9775), 1379. https://doi.org/10.1016/S0140-6736(11)60556-4

LaPlante, M. P., Kaye, H. S., Kang, T., & Harrington, C. (2004). Unmet need for personal assistance services: Estimating the shortfall in hours of help and adverse consequences. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 59*(2), S98–S108. https://doi.org/10.1093/geronb/59.2.S98

Leira, A., & Saraceno, C. (2002). Care: Actors, relationships and contexts. In B. Hobson, J. Lewis, & B. Siim (Eds.), *Contested concepts in gender and social politics* (pp. 55–83). Edward Elgar. https://doi.org/10.4337/9781781950340

Lévesque, L., Wolfson, C., Bergman, H., Béland, F., Trahan, F., & Perrault, A. (2004). *Unmet needs for help and community-based services for the elderly aged 75 years and over*. Canadian Health Services Research Foundation.

Lima, J. C., & Allen, S. M. (2001). Targeting risk for unmet need: Not enough help versus no help at all. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 56*(5), S302–S310. https://doi.org/10.1093/geronb/56.5.s302

Liu, Y.-H., Chang, H.-J., & Huang, C.-C. (2012). The unmet activities of daily living (ADL) needs of dependent elders and their related factors: An approach from both an individual- and area-level perspective. *International Journal of Gerontology, 6*(3), 163–168. https://doi.org/10.1016/j.ijge.2012.05.009

Lorant, V., & Dauvrin, M. (2012). Ethnicity and socioeconomic status as determinants of health. In D. Ingleby, A. Krasnik, V. Lorant, & O. Razum (Eds.), *Health inequalities and risk factors among migrants and ethnic minorities* (Vol. 1, pp. 69–78). Garant.

Momtaz, Y. A., Hamid, T. A., & Ibrahim, R. (2012). Unmet needs among disabled elderly Malaysians. *Social Science & Medicine, 75*(5), 859–863. https://doi.org/10.1016/j.socscimed.2012.03.047

Nazroo, J. Y., & Williams, D. R. (2006). The social determination of ethnic/racial inequalities in health. In M. Marmot & R. Wilkinson (Eds.), *Social determinants of health* (2nd ed., pp. 238–266). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198565895.003.12

Newcomer, R., Kang, T., LaPlante, M., & Kaye, S. (2005). Living quarters and unmet need for personal care assistance among adults with disabilities. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 60*(4), S205–S213. https://doi.org/10.1093/geronb/60.4.s205

Nordberg, G. (2007). *Formal and informal care in an urban and a rural elderly population: Who? When? What?* Karolinska Institutet.

Otero, A., de Yébenes, M. J., Rodríguez-Laso, A., & Zunzunegui, M. V. (2003). Unmet home care needs among community-dwelling elderly people in Spain. *Aging Clinical and Experimental Research, 15*(3), 234–242. https://doi.org/10.1007/BF03324504

Peng, R., Wu, B., & Ling, L. (2015). Undermet needs for assistance in personal activities of daily living among community-dwelling oldest old in China from 2005 to 2008. *Research on Aging, 37*(2), 148–170. https://doi.org/10.1177/0164027514524257

Rodrigues, R., & Schmidt, A. (2010). *Paying for long-term care*. Policy Brief. European Centre for Social Welfare Policy and Research. Retrieved August 23, 2021, from https://www.euro.centre.org/publications/detail/390

Rogero-García, J., & Ahmed-Mohamed, K. (2011). La satisfacción de las necesidades de las personas dependientes de 60 años y más según proveedor de cuidado. España, 2008. *Revista Española de Salud Pública, 85*(6), 541–553.

Rogero-García, J., & Ahmed-Mohamed, K. (2014). What is the best care for community-dwelling dependent adults? Sources of care and perception of unmet needs in Spain. *Revista Internacional de Sociología, 72*(2), 403–427. https://doi.org/10.3989/ris.2012.09.12

Schure, M. B., Conte, K. P., & Goins, R. T. (2015). Unmet assistance need among older American Indians: The native elder care study. *The Gerontologist, 55*(6), 920–928. https://doi.org/10.1093/geront/gnt211

Scott, J., Dex, S., Joshi, H., & Plagnol, A. C. (2012). Introduction: gender inequalities in production and reproduction. In J. Scott & S. Dex (Eds.), *Gendered lives: Gender inequalities in production and reproduction* (pp. 1–22). Edward Elgar. https://doi.org/10.4337/9781849806275.00006

Siegrist, J., & Marmot, M. (Eds.). (2006). *Social inequalities in health: New evidence and policy implications*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198568162.001.0001

Sundström, G., Fransson, E., Malmberg, B., & Davey, A. (2009). Loneliness among older Europeans. *European Journal of Ageing, 6*(4), 267–275. https://doi.org/10.1007/s10433-009-0134-8

Szebehely, M., & Trydegård, G.-B. (2012). Home care for older people in Sweden: A universal model in transition. *Health and Social Care in the Community, 20*(3), 300–309. https://doi.org/10.1111/j.1365-2524.2011.01046.x

Vlachantoni, A. (2019). Unmet need for social care among older people. *Ageing & Society, 39*(4), 657–684. https://doi.org/10.1017/S0144686X17001118

Volckaert, E., Schillebeeckx, E., & De Decker, P. (2020). Beyond nostalgia: Older people's perspectives on informal care in rural Flanders. *Journal of Rural Studies.*https://doi.org/10.1016/j.jrurstud.2020.07.006

Wilkinson-Meyers, L., Brown, P., McLean, C., & Kerse, N. (2014). Met and unmet need for personal assistance among community-dwelling New Zealanders 75 years and over. *Health and Social Care in the Community, 22*(3), 3173–3127. https://doi.org/10.1111/hsc.12087

Williams, F. (2021). *Social policy: A critical and intersectional analysis*. Polity Press.

Wouterse, B., Hussem, A., & Wong, A. (2021). The risk protection and redistribution effects of long-term care co-payments. *Journal of Risk and Insurance.*https://doi.org/10.1111/jori.12337

Wu, Z., Penning, M. J., & Schimmele, C. M. (2005). Immigrant status and unmet health care needs. *Canadian Journal of Public Health, 96*(5), 369–373. https://doi.org/10.1007/BF03404035

Zhen, Z., Feng, Q., & Gu, D. (2015). The impacts of unmet needs for long-term care on mortality among older adults in China. *Journal of Disability Policy Studies, 25*(4), 243–251. https://doi.org/10.1177/1044207313486521

Zhu, H. (2015). Unmet needs in long-term care and their associated factors among the oldest old in China. *BMC Geriatrics, 15*, 46. https://doi.org/10.1186/s12877-015-0045-9

Zhu, Y., & Österle, A. (2017). Rural-urban disparities in unmet long-term care needs in China: The role of the *hukou* status. *Social Science & Medicine, 191*, 30–37. https://doi.org/10.1016/j.socscimed.2017.08.025