

Social and Gender Differences in Informal Caregiving for Sick, Disabled, or Elderly Persons: A Cross-Sectional Study

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Abstract

Introduction: Informal caregivers are in increasing demand to provide care for sick, disabled, and elderly persons in the years to come, also in the Nordic welfare states. Informal caregivers can provide different types of care, such as personal care, supervision, and practical help, and previous research has shown that women take on a heavier care burden than men. However, structural differences in care tasks and caregiver burden in the Norwegian population is an under-researched area of study.

Objective: The study objective is to explore different types of informal care and caregivers in the Norwegian population and assess how different types of caregivers are distributed across socio-demographic groups.

Methods: A cross-sectional population survey was conducted in 2014. A random sample of 20,000 people above 16 years of age was drawn from the national population register. The net sample consisted of 4,000 individuals, giving a response rate of 20.2%. Data were collected using telephone interviews. We used descriptive statistics, crosstabulations with chi-square tests and multinomial regression analyses.

Results: Fifteen and seven percent of the respondents reported that they regularly helped persons with special care needs outside and inside their own household, respectively. Women were more likely than men to give personal care, whereas men were overrepresented among caregivers providing practical help only. The mean age of caregivers providing practical help only was significantly lower than for caregivers providing personal care.

Conclusion: Our results indicate that women take on a heavier care load, both by providing more personal care than men and in that they spend more time caring. It is important that nurses and other healthcare professionals in community care have knowledge about structures of inequality in informal caregiver tasks and burden so that they can better identify opportunities for improved coordination between formal and informal care.

Keywords

family care, care tasks, personal care, practical help, gender inequality

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Introduction

In European societies, demographic changes are putting national welfare schemes under increasing pressure (Geerts et al., 2012; Kingston et al., 2018). Due to major reforms and cutbacks in long-term care in many European countries, informal caregivers are predicted to be in increasing demand to provide care for sick, disabled, or elderly persons in the years to come (de Jong et al., 2019; Hoff, 2015; Percival & Kelly, 2005; Pickard, 2015; Zigante, 2018). Informal care is generally defined as “the unpaid care provided to older and dependent persons by a person with whom they have a social relationship, such as a spouse, parent, child, other relative, neighbour, friend or other non-kin” (Broese van Groenou & De Boer, 2016, p. 271).

The development towards increased reliance on informal caregivers also applies to the Nordic welfare states (Dahlberg et al., 2018; Skinner et al., 2020). In Norway, there has been an increased focus on sustaining informal care resources in recent government white papers and reports (Ministry of Health and Care Services, 2013, 2018;

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Norwegian Official Report [NOU], 2011, p. 11). But despite the increased policy interest in informal caregivers' contributions, there has been limited available population survey data about what types of care tasks informal caregivers perform and how caregiving burden is distributed across socio-demographic groups. In order to support social policy development and facilitation of caregiver support schemes, analyzing what informal caregivers do and who they are is arguably useful, as it makes it possible to distinguish which caregivers are at the "heavy end" of the caring spectrum (providing many hours of personal care per day), and which are at the "lighter end" (giving practical help on an ad-hoc basis) (Nolan et al., 1996; Parker & Lawton, 1994). Moreover, investigating how the care tasks undertaken vary with regard to variables such as gender, age, and socio-economic position also makes it possible to identify potential structures of inequality in care provision and opportunities for corrective policy development.

Review of Literature

Norway is an example of a Nordic welfare state, characterized by universal rights, extensive public funding, and local autonomy (Dahl et al., 2015; Esping-Andersen, 2002). In Norway, provision of long-term care for both young and old is legally the responsibility of the municipality, and formal caregivers cannot rely on informal caregivers to take on caregiving responsibilities for others than their underage children (Molven, 2017). This is the same as in the other Nordic countries and the Netherlands, where filial obligation has been removed from legislation, giving public welfare the primary legal responsibility of providing care for sick, disabled, or elderly persons (Ministry of Health and Care Services, 2006). The Norwegian Patient and User Rights Act (2001) specifies that long-term care services are to be targeted and tailored towards the care receiver's needs (Molven, 2017). Thus, the municipality cannot legally include the availability of family or other potential informal caregivers as a mediating factor when they assess individual receivers' needs and allocate services (Ministry of Health and Care Services, 2006). This tension between increased policy interest in informal caregivers' contributions and the inability of municipalities to ask family members to take on care tasks makes Norway an interesting case study of the distribution of caregiver burden and different types of informal caregivers.

Statistics Norway's living conditions survey from 2015 indicated that only 2% of the adult Norwegian population regularly provided informal care for someone they live with, while 13% helped someone who was sick, disabled, or elderly outside their own household (Statistics Norway, 2016). Existing research shows that age and gender are significant determining variables for *who* provides informal care across countries and contexts (Jegermalm, 2006). The likelihood of providing care for friends and family increases as people reach their forties or fifties and beyond (Skinner et al., 2020;

Statistics Norway, 2016). Moreover, women are more likely providers of informal care than men, both in terms of the amount of time devoted to providing care and in terms of the caring load being heavier (Martin-Matthews & Campbell, 1995; Sand, 2005). Although there have been some qualitative studies exploring what Norwegian informal caregivers do, large-scale quantitative studies about what types of care tasks caregivers perform inside and outside the household are lacking. This study aims to address this research gap.

In the literature about informal caregiving, a range of typologies have been put forward to describe and identify different types of informal care, from process-oriented typologies (Bowers, 1987; Nolan et al., 1995) to typologies separating between instrumental activities of daily living (e.g., help with preparing meals, laundry, and cleaning) and performance activities of daily living (e.g., help with personal hygiene, dressing, and eating) (Dale et al., 2008; Kirchoff & Andersen, 2015; Sigurdardottir & Kåreholt, 2014). Moreover, a number of researchers argue that emotional support, social contact, and keeping an eye on someone are crucial aspects of the informal caregiving role, and thus, they include social contact, emotional support, and supervision in their typologies of informal care (Horowitz, 1985; Jegermalm, 2006; Parker & Lawton, 1994; Romøren, 2001, 2003).

The objective of this paper is to explore different types of informal care and caregivers in the Norwegian population and assess how different types of caregivers are distributed across socio-demographic groups. Our focus is on informal caregiving to people with special care needs, that is, adults or children who are sick, disabled, or elderly, as this reveals whether the caregiver helps (potential) receivers of public long-term care services. We separate between same-household and another-household caregiving, as we expect the greater distance in the latter relationship (geographical and other) to make the care tasks differ from those carried out in the same household. In our analysis, we adopt a typology of care and caregivers which builds on three broad categories of care tasks: (1) personal care, (2) keeping company or keeping an eye on someone, and (3) practical help; and four categories of caregivers: (1) those providing personal care (whether or not in combination with other care tasks), (2) those keeping an eye or company *only*, (3) those keeping an eye/contact *and* providing practical help, and (4) those providing practical help *only* (Jegermalm, 2006).

More details about the care and caregiver categories and the methods used in the study are provided in the section below.

Methods

Study Setting and Design

In order to investigate the prevalence and socio-demographic distribution of informal caregiving in Norway, we conducted a cross-sectional study. We used data from a national

population survey on voluntary work and informal caregiving, conducted between March and October 2014. Norway's total population was 5,109,000 in 2014 (Statistics Norway, 2014).

Research Questions

We asked the following research questions:

1. How prevalent are different types of informal care and caregivers in Norway?
2. How are different types of caregivers distributed across socio-demographic groups?

Sampling Procedure

In total, a random sample of 20,000 people aged 16 years and older was drawn from the national population register. Since the survey focused on volunteering and informal caregiving, 16 and 17-year-olds were included in the sample because they are also potential volunteers and informal caregivers. Due to challenges posed by falling response rates in national surveys, the goal was to recruit 4,000 respondents in order to attain a robust dataset for multivariate analyses. The pre-set sample goal was reached (N = 4,000), giving a response rate of 20.2%.

Data Collection Procedure

Data were collected through telephone interviews. The questionnaire used a structured multiple-choice approach. The average interview time was 18 minutes. Respondents were first asked a comprehensive set of questions about their participation in voluntary work and subsequently about their informal caregiving activities, monetary donations to charities, and political attitudes. The final part of the interview included a range of background questions, including education, employment status, and household size. Information about gender and year of birth was obtained from the national population register.

Instrument Validation

The survey items on informal caregiving were modelled on items used in a series of four Swedish population studies from 1998 to 2014 (von Essen et al., 2015). They separated between informal care given to cohabiters and non-cohabiters and asked questions about the care receiver and the nature and scope of the help/care given. The questionnaire items' suitability to the Norwegian context were discussed by a team of Norwegian and Swedish researchers. Due to the close cultural and linguistic kinship of Swedish and Norwegian, the team concluded that the items were transferable to the Norwegian study once translated, with only minor adjustments to wording to fit with the Norwegian context and language.

Table 1. Survey Items—Prevalence of Informal Caregiving.

Informal help/care for persons with special care needs outside household
<i>Do you provide, on a regular basis, help to relatives you do not live with, neighbours, friends or colleagues [e.g., help with transportation, food shopping, gardening, tidying, cleaning, looking after, care or other help]? YES/ NO</i>
<i>If yes, does the person you help (the most) special care needs? By this, we mean comprehensive support to older, sick or physically disabled people. YES/NO</i>
<i>If yes, approximately how many hours did you spend in the last four weeks helping this person?</i>
Informal help/care for persons with special care needs in same household
<i>Do you provide, on a regular basis, help to someone in your own household with special care needs? [e.g., help to older, sick or physically disabled people]? YES/NO</i>
<i>If yes, approximately how many hours did you spend in the last four weeks helping this person?</i>

Table 2. Categories of Care Tasks.

Care tasks	Category
<i>What kind of help do you provide?</i>	
<i>1. Keeping company, contact</i>	Keeping
<i>2. Keeping an eye on someone [e.g., checking that everything is alright, regular phone contact]</i>	company/ an eye on
<i>3. Personal care [e.g., hygiene, help with medications, moving from A to B]</i>	Personal care
<i>4. Housework [e.g., cleaning, preparing meals, food shopping]</i>	
<i>5. Administrative tasks/paperwork [e.g., banking, contact with authorities, healthcare]</i>	Practical help
<i>6. Transport [e.g., giving a lift in a car]</i>	
<i>7. Gardening, household repairs etc.</i>	
<i>8. Other</i>	Excluded from the analysis

Dependent Variables—Types of Caregivers

The dependent variables were the types of informal caregivers who provide help or care to persons with special care needs in another household or in the same household. The caregiver categories were based on a battery of survey items asking what types of care tasks the informal caregivers provided. In order to further assess differences in care burden, we also descriptively analysed the estimated number of hours spent providing informal help/care in the last 4 weeks. The survey items used are presented in Tables 1 and 2.

To construct the dependent variables of another-household and same-household informal caregivers, the care tasks were divided into three categories of care, as outlined above (also see column two in Table 2). The three categories of care tasks were used to construct four caregiver

categories (presented in Table 4), in line with the work of Jegermalm (2004, 2006). The first category was that of caregivers who provide personal care (alternative 3 in Table 2), whether or not in combination with other care tasks. The three other categories included combinations of other care tasks which precluded the provision of personal care. This separation between those who provided personal care and those who did other care tasks was done because personal care is thought to give the caregiving role a fundamentally different character (Jegermalm, 2006). The second category embodied caregivers whose care consisted of keeping company or keeping an eye on *only* (alternatives 1 or 2 or both *only*). The third category involved caregivers who combined keeping company/an eye on with practical help (housework, paperwork, transport, gardening etc.) (any combination of alternatives 1–2 and 4–7). The final category included caregivers who *only* provided some form of practical help (alternatives 4–7 only). In total, 28 providing same-household informal care and 20 respondents providing another-household informal care did not specify what care tasks they did and were excluded from the analysis of care tasks. This resulted in a final sample size of 262 for another-household and 596 for same-household informal care.

Independent Variables

Age, gender, education level, employment status, and household size were included as independent variables in the study. Educational level was measured as an ordinal variable with three categories: (1) compulsory school, (2) secondary education, and (3) higher education. Employment status was measured as an ordinal variable divided into (1) full-time work and (2) not working full time; and household size was ordinal with three categories: households with 1, 2, and ≥ 3 persons, respectively.

Data Quality

A weakness in our data was that the survey items about hours spent providing informal care only asked about help and care for the person respondents helped the most. Since 74% of those who did informal care for someone with special care needs outside the household stated that they helped more than one person, some unpaid care work will have gone undetected in our study. Moreover, judging from the large number of missing data in the hours variables, it is likely that respondents found it difficult to give estimates of time spent on providing informal care in the last four weeks. For informal care in the same household, 75 respondents (29%) did not provide an estimate; for another-household care, 70 respondents (12%) did not give an estimate.

Statistical Analysis

We used descriptive statistics to describe the sample and the categories of informal care according to relevant background

variables. Relationships between informal care and socio-demographic variables were investigated by crosstabulations with chi-square tests (two-sided). Multinomial logistic regression analyses were conducted to further investigate the characteristics of the care typologies. Gender, age, and the socio-economic variables that showed statistically significant differences between the types of care were included in the regression analyses. There were some missing data in the independent variables. The cases with missing data were included in the analysis where possible. The software used was IBM SPSS Statistics version 26.

Ethics Approval and Informed Consent

Ethical approval for the survey was granted by the Norwegian Centre for Research Data (NSD), reference number 38574. Written information about the aim of the study, the confidentiality of the data handling, and the voluntary nature of participation was provided to participants in an invitation to participate in the study sent by post. Invitations to 16- and 17-year-olds were addressed to their parents/guardians. Informed consent was obtained through participation in the telephone interview. Respondents were guaranteed anonymity.

Results

The response rate was 20.2%. In total, 19,761 individuals received the information letter sent by post and were contacted for a telephone interview, of which 15,761 either declined participation or were unavailable for an interview. A total of 4,000 people agreed to participate; 2,024 were interviewed in spring 2014, and 1,976 in the autumn. The subgroups of non-respondents were: those who refused to participate in the study (42.9%), those who did not answer the phone (31.2%), those whose phone number was incorrect (15.8%), those who were in an institution or were ill (8.3%), and finally, those who were unavailable or away during the interview period (1.8%) (Arnesen, 2015). Younger age groups and people with low levels of education were somewhat overrepresented among the non-respondents. Immigrants were also underrepresented in the sample as a result of the low response rate, so the results are only representative of the majority population in Norway. Otherwise, no major structural differences between non-respondents and those interviewed were detected. Sample characteristics are presented in Table 3.

Our analysis showed that 14.9% and 6.6% reported that they regularly helped or cared for persons with special care needs outside and inside their own household, respectively. The sample overview indicated that there were no significant gender differences in same-household caregiving, but that women were more likely to be caregivers for people who were sick, disabled or elderly in another household than men. There were significant differences in informal caregiving

Table 3. Sample Overview—Informal Caregivers for Persons With Special Care Needs and Total Sample.

Informal care for person in...	Another household N (%)	Same household N (%)	Total sample N (%)
Total	596 (14.9)	262 (6.6)	4000 (100)
Gender			
Men	220 (36.9)	124 (47.3)	1948 (48.7)
Women	376 (63.1)	138 (52.7)	2052 (51.3)
Chi-sq (p)	<.001	.646	
Age group			
Under 45 years	216 (36.2)	96 (36.6)	1798 (45.0)
45–59 years	207 (34.7)	78 (29.8)	1073 (26.8)
60 years and older	173 (29.0)	88 (33.6)	1129 (28.2)
Chi-sq (p)	<.001	.018	
Age min–max	16–86	16–88	16–97
Education level			
Compulsory school	37 (6.2)	16 (6.2)	292 (7.4)
Secondary education	187 (31.5)	98 (37.8)	1347 (34.1)
Higher education	369 (62.2)	145 (56.0)	2316 (58.6)
Chi-sq (p)	.126	.364	
Missing (N)	3	3	45
Household size			
Live alone	123 (20.7)	-	834 (21.0)
2 persons in household	251 (42.3)	115 (46.7)	1523 (38.3)
3 or more persons in household	219 (36.9)	131 (53.3)	1622 (40.8)
Chi-sq (p)	.063	.583	
Missing (N)	3	16	21
Employment status			
Full-time work	330 (55.7)	138 (53.5)	2236 (56.5)
Not working full-time	262 (44.3)	120 (46.5)	1725 (43.5)
Chi-sq (p)	.707	.321	
Missing (N)	4	4	39

across age groups in both samples, but no significant differences were found in education level, household size, or employment status.

Table 4 shows the prevalence of the different caregiving categories in the sample. It appeared that the caregivers providing *personal care* or *practical help only* were the two largest groups both in another-household and same-household caregiving, although there was a reasonably even spread of caregivers across the four types. Nevertheless, *personal care* was by far most prevalent in

Table 4. Dependent Variable Descriptives—Categories of Caregivers for Persons With Special Care Needs.

Category	Another household (n = 576) %	Same household (n = 234) %
Caregivers who provide...		
1. Personal care (whether or not in combination with other caring tasks)	29.2	37.6
<i>Categories without personal care</i>		
2. Keeping company and/or keeping an eye on only	16.7	21.4
3. Keeping company and/or keeping an eye on + practical help (any combination of housework, paperwork, taking out, gardening etc.)	23.6	16.7
4. Practical help only	30.6	24.4
Total	100	100

same-household caregiving, with nearly 40% of caregivers providing this type of care.

Informal Care for Persons With Special Care Needs Outside the Household

Table 5 shows that there were marked differences between the types of care provided by women and men to persons outside the household. Women were more likely than men to give the first three types of care, *personal care* in particular, whereas men were overrepresented among the caregivers providing *practical help only*. Furthermore, the mean age of caregivers providing *practical help only* was significantly lower than that of providers of *personal care* ($p = .001$) and those *keeping company/an eye on only* ($p = .008$). All other pairwise differences in age were insignificant ($p \geq .128$). Table 5 shows that there were no significant differences between the different caregiver types in education level or economic status. Our results clearly showed which group of carers provided the most help in terms of hours spent: the average number of hours provided by *personal care* caregivers was significantly higher than in all the other three categories ($p \leq .012$) with an average of 30 h per month for *personal care*, compared to under 14 h for the other categories. All other pairwise differences in hours of help were insignificant ($p \geq .261$).

The results from the regression analysis confirmed the relationships between the different caregiver types and gender and age (see Table 6). Men had significantly higher odds of being a caregiver providing *practical help only* than any of the other caregiving types, and the odds providing *personal care* over *practical help only* were significantly higher for women than for men (OR 2.92 [CI 1.84, 4.64], $p < .001$, not shown in table). Higher age increased the odds of

Table 5. Characteristics of Non-Cohabiting Caregivers (Another Household), Based on Different Types of Care.

	1. Personal care (n = 168)	2. Keeping company/an eye on only (n = 96)	3. Practical help & company/eye (n = 136)	4. Practical help only (n = 176)	Total (n = 576)	Chi-sq p
Gender:						<.001
Men	25.0	34.4	30.9	50.6	35.8	
Women	75.0	65.6	69.1	49.4	64.2	
Age, mean (SD) ^a	51.6 (15.6)	50.3 (18.1)	50.8 (14.1)	45.3 (15.4)	49.3 (15.8)	.001
Educational level:						.373
Compulsory school	6.5	9.7	5.9	4.0	6.1	
Secondary education	32.1	35.5	26.5	32.4	31.4	
Higher education	61.3	54.8	67.6	63.6	62.5	
Household size:						.197
Living alone	25.0	22.9	16.3	17.8	20.4	
Not living alone	75.0	77.1	83.7	82.2	79.6	
Employment status:						.077
Full-time work	54.8	45.2	58.8	61.1	56.1	
Not working full-time	45.2	54.8	41.2	38.9	43.9	
Hours of help given per month, mean (SD) ^a (n = 526)	29.8 (59.7)	13.0 (20.2)	13.7 (16.2)	10.1 (13.2)	17.2 (35.9)	<.001

^aDifferences between age and hours of help given per month (Tamhane procedure for multiple comparisons).

Table 6. Multinomial Logistic Regression Analysis—Caregivers Providing Informal Care for Someone in Another Household With “Practical Help Only” as Reference Group for the Dependent variable.

	1. Personal care		2. Keep company/eye only		3. Practical help & company/eye		Overall p ^a
	OR (CI)	p	OR (CI)	p	OR (CI)	p	
Age (per 10 years)	1.27 (1.10, 1.46)	.001	1.21 (1.03, 1.42)	.021	1.23 (1.06, 1.42)	.006	.004
Male gender	0.34 (0.22, 0.54)	<.001	0.53 (0.32, 0.89)	.017	0.46 (0.28, 0.73)	.001	<.001

Odds ratio (OR); 95% confidence intervals (CI).

^aOverall p from a likelihood ratio test.

providing the first three categories of care as opposed to *practical care only*.

Informal Care for Persons With Special Care Needs in Same Household

Table 7 displays the crosstabulations of the characteristics of cohabiting caregivers according to the different types of care. It shows no statistically significant differences between the genders across the care categories. Regarding age, the mean age of caregivers *keeping company/an eye on only* was significantly lower than that of caregivers providing *practical help & keeping company/an eye on* a cohabiter ($p = .021$). All other pairwise differences were insignificant ($p \geq .185$). Differences in education level across the four groups were not significant, but Table 7 shows that the type of care provision differs across household size: a higher proportion

of informal caregivers living in larger households (≥ 3) provide *personal care* or *keep company/an eye on only* than those living with only one other person ($p = .019$). We found no significant differences between the different caregiver types in work status. But again, our results clearly showed that the caregivers providing personal care were the group that provided the most care/help in terms of hours spent: the average number of hours of help from *personal care* caregivers was significantly higher than that given by providers of *practical help & keeping company/an eye on* ($p = .003$) and those giving *practical help only* ($p = .002$), with nearly 70 h per month for *personal care*, compared to 20 h or less for the latter two categories. All other pairwise differences in hours of help were insignificant ($p \geq .198$).

The results from the regression analysis, as shown in Table 8, indicated that there were significant differences between the genders and the two categories *personal care*

Table 7. Characteristics of Cohabiting Caregivers (Same Household), Based on Different Types of Care (%).

	1. Personal care (n = 88)	2. Keeping company/an eye on only (n = 50)	3. Practical help & company/eye (n = 39)	4. Practical help only (n = 57)	Total (n = 234)	Chi-sq p
Gender:						.099
Men	39.8	40.0	53.8	57.9	46.6	
Women	60.2	60.0	46.2	42.1	53.4	
Age, mean (SD) ^a	52.5 (16.4)	46.2 (16.7)	55.8 (13.6)	50.0 (19.2)	51.1 (17.0)	.044
Educational level:						.116
Compulsory school	3.4	12.0	2.6	10.7	6.9	
Secondary education	32.2	44.0	33.3	39.3	36.6	
Higher education	64.4	44.0	64.1	50.0	56.5	
Household size:						.019
2	43.0	34.9	67.6	52.8	47.9	
≥3	57.0	65.1	32.4	47.2	52.1	
Employment status:						.970
Full-time work	53.4	54.2	51.3	50.0	52.4	
Not working full-time	46.6	45.8	48.7	50.0	47.6	
Hours of help per month, mean (SD) ^a (n = 187)	68.6 (94.5)	31.3 (78.8)	20.1 (26.0)	18.2 (31.5)	39.0 (72.9)	.001

^aTamhane procedure for multiple comparisons.

Table 8. Multinomial Logistic Regression Analysis—Caregivers Providing Informal Care for Someone in Same Household With “Personal Care” as Reference Group for the Dependent variable.

	2. Keep company/eye only		3. Practical help& company/eye		4. Practical help only		Overall p ^a
	OR (CI)	p	OR (CI)	p	OR (CI)	p	
Age (per 10 years)	0.62 (0.46, 0.84)	.002	0.86 (0.63, 1.19)	.364	0.77 (0.58, 1.03)	.073	.013
Male gender	1.05 (0.49, 2.27)	.902	1.71 (0.77, 3.77)	.186	2.14 (1.06, 4.33)	.035	.131
Living with one person ^b	1.93 (0.72, 5.18)	.194	3.72 (1.28, 10.86)	.016	2.51 (0.99, 6.34)	.053	.062

Odds ratio (OR); 95% confidence intervals (CI).

^aOverall p from a likelihood ratio test.

^bReference group: Living with two or more people.

and *practical help only* also when it came to same-household informal care. Men had significantly higher odds of being a caregiver providing *practical help only* than a caregiver providing *personal care*. Moreover, higher age increased the odds of providing *personal care* compared to just keeping company/an eye on a cohabiter, whereas living with only one person increased the odds of being a caregiver providing *practical help and keeping company/an eye*.

Discussion

The aim of this paper was to explore different types of informal care and caregivers for sick, disabled, or elderly persons

in the same household and another household in Norway, focusing on: (1) the prevalence of different care and caregiver types, and (2) how different types of caregivers were distributed across socio-demographic groups.

Our results showed that the caregivers providing *personal care* (often in combination with other care tasks) represented a sizable group of the informal caregivers in Norway. They made up the largest group among the same-household caregivers (nearly 40%), while in another-household informal care, the *personal care* and *practical help only* groups were similarly sized (around 30% each). Swedish studies indicate the presence of a similar pattern: personal care is more common among same-household informal caregivers,

whereas keeping company, supervision, and practical help are the dominant care tasks when caregivers help someone outside their own household (Jegermalm & Torgé, 2021). Conversely, our study indicates that the majority of same-household and another-household caregivers (60% and 70%, respectively, in our study) do *not* provide personal care. This harmonizes with international and Nordic research on preferences on the division of care tasks in formal and informal caregiving. Care receivers and informal caregivers prefer intimate personal care tasks to be carried out by formal caregivers, so that informal caregivers' time and capacity can be freed up for providing emotional support, engaging in social interaction and helping with more practical tasks (Dale et al., 2008; Daatland & Herlofson, 2004; Daatland et al., 2009; Kröger, 2005; Lee et al., 2020; Martin-Matthews, 2007). So, the relatively high prevalence of non-personal care tasks in our data indicate a relatively high level of task specificity in formal and informal care; that is, the formal care system leaves tasks such as practical help to care receivers and their family or network (Dahlberg et al., 2018). On the other hand, the considerable amount of personal care that particularly co-habiting caregivers provide supports the so-called "substitutional model," whereby formal and informal caregivers carry out similar care tasks and can substitute one another (Li & Song, 2021; Lingsom, 1997).

Our study shows that non-cohabiting caregivers provide significantly fewer hours of help or care per month compared to those who care for someone they live with; this is confirmed by other studies in and outside of Norway (Jegermalm & Torgé, 2021; Ydstebø et al., 2020). However, being an informal caregiver for someone with special care needs can be a considerable burden for same-household and another-household caregivers alike. Not only does informal caregiving typically present challenges balancing caregiving responsibilities with work, family life, and other responsibilities (Vicente et al., 2022); caregivers also often suffer from considerable psychological stress and anxiety, especially if the care receiver has extensive care needs (del-Pino-Casado et al., 2021; Wold et al., 2017).

We found no significant differences between types of care and caregivers and socio-economic variables (education and work status), but our results indicate that higher age make it more likely to provide informal care that includes personal care compared to other caregiving categories, especially in another-household caregiving. Moreover, our results point to important gender differences between the types of care provided. In both same-household and another-household caregiving, we found that the typical "practical helper" was male and that the typical informal caregiver providing personal care was female. There is a clear pattern whereby women to a larger extent than men take on caring tasks on the heavier end of the caring spectrum, such as help with personal hygiene, dressing, and eating, while male informal caregivers are more commonly involved as providers of

practical help, such as housework, paperwork, transport, gardening, or household repairs. Thus, our results seem to confirm results obtained in other studies on informal care, namely that women take on a heavier care burden than men both through their higher involvement in personal care and a higher number of hours spent providing care (Jegermalm, 2006; Martin-Matthews & Campbell, 1995; Verbakel et al., 2017; Vicente et al., 2022).

The informal caregiving literature offers several societal and individual-level explanations of the differences between men and women's caring roles: gender differences in labor participation (more women working part-time), co-residence (wives outliving their husbands), contact preferences (women wanting more contact), traditional gender roles, and expectations of who should provide (what kind of) care (both from caregiver and care receiver) (Campbell & Martin-Matthews, 2000; Lee et al., 2020; Romøren, 2001, 2003). The literature also points to the importance of gender boundaries, or taboos, in personal care, whereby women are the preferred caregivers (Campbell & Martin-Matthews, 2000; Martin-Matthews, 2007; Romøren, 2001). Female care receivers are also far more likely to prefer formal care to informal care, while the opposite is true for men (Lee et al., 2020).

Another potential explanation of gender differences in informal caregiving is gender bias in health and social care allocation practices. If allocation practices are biased, it will undoubtedly affect the division of labor between formal and informal care, especially in the sphere of personal care. As a corollary, it also influences what kinds of tasks men and women take on in their caregiving roles. In a survey experiment among professional needs assessors for long-term care services, Jakobsson *et al.* found that if an elderly woman had a son, she would receive 34% more formal care than if she had a daughter (Jakobsson et al., 2016). Similar gender inequalities have also been documented for cohabiting individuals in need of care: another study showed that "men living with cohabitants received substantially less care than women, [implying] that female cohabitants act as a substitute for public care to a larger degree than male cohabitants" (Døhl et al., 2016, p. 305).

Strengths and Limitations

An important strength of our study is its generalizability—that it is the first to investigate types of informal care tasks and caregivers on a large sample of the population in Norway. Thus, it provides unique insights into the phenomenon of informal caregiving hitherto unknown. However, a limitation is the considerable non-response rate in the survey (79.8%). Survey overload and fatigue is a known problem in social research. Nevertheless, studies show that high non-response does not necessarily equal biased results, and that surveys with response rates far below 20% may still produce scientifically valuable data (Groves,

2006; Hellevik, 2016). The recruitment of a high number of respondents who reflected the demographic and geographical make-up of the population strengthens the confidence in the results and their generalizability to the population.

Implications for Practice

Knowledge of what kinds of tasks informal caregivers carry out and who does what and how much is of great pertinence to healthcare administrators, managers, nurses, and other healthcare professionals providing services to older, sick, or physically disabled people. On the one hand, managers, administrators, and formal caregivers must be attentive to possible biases in allocation and caregiving practices, ensuring that caregivers are given the support they need regardless of gender or socio-economic background. On the other hand, with increasing pressure on health and long-term care systems across the world due to an ageing population and other demographic changes, the formal health and care service system needs to be responsive to what informal caregivers do in order to improve collaboration and coordination between formal and informal care.

Conclusions

Our results show how informal caregiving for sick, disabled, or elderly persons in Norway is performed by a relatively low percentage of the population—even “lighter end” care tasks such as keeping company and practical help. However, the contribution of those who perform informal care is substantial when considering time spent. This is particularly so for persons providing personal care. We observed largely the same socio-demographic variations in same-household caregiving as outside-household caregiving: education and work status were not associated with caregiver types, but older persons and women were more likely to provide personal care. Thus, our results confirm findings from earlier studies showing that women take on a heavier care load, both by providing more personal care than men and spending more time caring. Exploring perceptions of inequalities on different levels (micro/general public, meso/health personnel and macro/decision-makers) would be an important venue for further research, as would testing theories of gender differences in care tasks and burden.

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Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethics Approval and Informed Consent

Ethical approval for the survey was granted by the Norwegian Centre for Research Data (NSD), reference number 38574. Written information about the aim of the study, the confidentiality of the data handling, and the voluntary nature of participation was provided to participants in the invitation to participate in the study. Informed consent was obtained through participation in the telephone interview. Respondents were guaranteed anonymity.

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