CHAPTER 4

Do They Know What Medication They Are Prescribed? A Study Among Persons Older Than 60 Years in Norway Receiving Home Care Services

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Abstract: Older persons are prescribed multiple medications, which increases the risk of mistreatment and drug interactions. To ensure correct drug use, patients should be well informed about the medications they are prescribed. The aim of the study underlying this chapter was to describe the relationship between which medications are prescribed, and the information patients have about these medications. Two hundred eight persons 60 years or older receiving home care from one Norwegian municipality were asked questions about what medications they were using, and the answers were compared to the list of prescribed medications for the person. A high proportion of the participants were prescribed psychotropic drugs. Most of the participants who were prescribed sedatives or analgesics were informed about their prescription and for what condition the medications were prescribed, but 17.4% of participants prescribed anxiolytics were not informed about the reason for the prescription, and 27.6% of the participants not prescribed sedatives said they used sleeping pills. As many as 63.4% who were not prescribed analgesics said they used painkillers. In total, most of the participants were aware of what medications they were prescribed, but a significant proportion of the participants were not fully

aware. Our results present a concern regarding patient safety. Health care personnel should inform patients more completely, and moreover, repeat information about the medication prescribed. Better knowledge about prescribed medication will help the patient understand his/her own diseases better, and thus make informed decisions about their own health.

The World Health Organisation (WHO) defines patient safety as: "A framework of organized activities that creates cultures, processes, procedures, behaviours, technologies and environments in health care that consistently and sustainably lower risks, reduce the occurrence of avoidable harm, make errors less likely and reduce the impact of harm when it does occur" (WHO, 2021, p. v). Moreover, the WHO patient safety framework for action is comprehensive and offers multiple action approaches by describing seven strategic objectives and 35 specific strategies. Each nation should prioritize areas of action, which range from the safety of clinical processes to patient and family engagement (WHO, 2021, p. 13).

An aim for patient safety work in Norwegian healthcare services is "a safe and secure healthcare service, without harm, for every patient and user, always and everywhere" (National Directorate of Health, 2022). During the last decade, patient safety work in health care services in Norway has received increased attention, and has been developed and enhanced especially through the campaign, In Safe Hands 24-7, which has targeted multiple topics and actions (National Directorate of Health, 2022). To improve patient safety in the healthcare services, all severe health-related incidents in Norway have been registered since 2019 (Ministry of Health and Care Services, 2017).

Relevant here are initiatives to reduce medication-related adverse events, including procedures targeting medication reconciliation, review, and control (National Directorate of Health, 2022). Due to the high number of medication-administration events reported, particularly in municipal healthcare services, the Norwegian National Commission of Inquiry has initiated a project to improve patient safety regarding the use of medication in municipal healthcare services (Norwegain Commision of Inquiry in Health and Care Services, 2021).

Statistics from 2019 show that adverse events occurred in 12.4% of hospital admissions, and that in all in-patient admissions to hospitals, injuries related to drugs occurred in 2.1% (National Directorate of Health, 2022). Healthcare services in municipalities lack similar statistics and registers (National Directorate of Health, 2022), and consequently fail to document changes related to this issue (Odberg, 2020). However, research shows that adverse events connected to medication do occur in municipal healthcare services, and they should get more attention. Particularly, studies that describe how patients living at home understand and comply with their medication treatment are needed (Olsen & Andreassen, 2016). Thus, continued efforts in patient safety work are essential.

In this chapter we will present results from a study in which elderly persons receiving home care services in Norway answered questions about what medications they were told they were prescribed.

Background

In Norway, national health reforms in the last two decades focus on quality improvements, coordination, continuity in care, and decentralization of services (Ministry of Health and Care Services, 2006, 2009, 2013, 2018). These national health reforms within healthcare services highlight health-promotion efforts, expecting the elderly to live longer in their own homes and, if needed, to receive home care services. Norwegian municipalities are obliged to provide health and care services for older adults, where institutional care, home care, and general practitioners are defined as core services (Skinner, Veenstra et al., 2020). Home care services typically consist of help for activities of daily living (ADL), for example, personal hygiene and meals, or medication administration (Ministry of Health and Care Services, 2011). In total, almost 200,000 persons receive home care services in Norway (Statistics Norway, 2021). Out of these, 110,000 persons are 67 years or older. Further, 28.9% of the population 80 years and older receive home care services (Statistics Norway, 2021).

In general, elderly persons are multimorbid, consequently causing a complex polypharmacy situation. Moreover, medication-related events

occur most frequently among the elderly (Olsen & Andreassen, 2016; Romskaug & Bakken, 2020). These events will typically appear as an increased risk of adverse effects from treatment, always considering the balance between benefit and harm. Given the situation and frailty of the elderly person, this demands a thorough clinical assessment in which the patient's preferences must be emphasized. This is crucial to ensure elderly patients safe and reasonable medication prescriptions (Romskaug & Bakken, 2020). Moreover, *event* is the preferred term according to the International Classification for Patient Safety (ICPS) conceptual framework, meaning "something that happens to or involves a patient" (WHO, 2009), and we have chosen to use this term in our study.

However, the particular characteristics of elderly patients is not the only factor associated with medication-related problems. How the healthcare services are organized is also of importance, since collaboration between different healthcare services and professionals has an impact and can affect the quality of outcomes (Skinner, Veenstra et al., 2020). Recent research has revealed a situation, as a result of the national healthcare reforms, where the decentralization of tasks from specialist health services[1] to the municipality and primary care service has led to a greater need for information exchange and collaboration between different healthcare providers within municipal health service organizations (Gautun & Syse, 2017; Skinner, Veenstra et al., 2020). To preserve the older person's need for continuity of care, better collaboration between nurses and general practitioners (GP) is needed (Skinner, Veenstra et al., 2020). Moreover, features of the municipality, such as number of inhabitants, socioeconomic factors, and limited resources in the healthcare sector, may also affect the situation (Gautun & Syse, 2017; Skinner, Veenstra et al., 2020).

Of special interest is the use of psychotropic medication among elderly people receiving home care services, and especially whether the patients are informed about what medications they are prescribed. Lack of information about what drugs they are prescribed and why,

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1   In Norway, specialist health services have other obligations and provide other health services than the municipalities, including hospital admissions.

may influence their compliance. Psychotropic drugs are antipsychotics, antidepressants, anxiolytics, sedatives, and anti-dementia drugs (Lornstad et al., 2019). Side and adverse effects like sedation, weakened muscle tone, hypotension, and orthostatism from these types of medications are of particular concern to the elderly, because they can lead to falls and trigger delirium (Romskaug & Bakken, 2020). Beyond individual consequences, adverse drug reactions are also a source of economic burdens for the healthcare systems through increased hospitalization, prolongation of hospital stay, and additional clinical investigations in more serious cases (Sultana et al., 2013). A review study reveals that approximately 10–20% of geriatric hospital admissions are drug-related, moreover 32–65% of adverse drug reactions occur in nursing homes (Sultana et al., 2013). Unfortunately, there is a lack of similar statistics and registers for Norwegian municipal healthcare services (Odberg, 2020).

We know that the prescription of psychotropic medication among elderly people is high. In a group of 1,001 people aged 70 years or more, 40.3% used psychotropic drugs, and the prescription of psychotropic drugs was higher in those admitted to a nursing home than in those living at home (Lornstad et al., 2019). Additionally, the combined use of alcohol and medication among the elderly has been given attention, showing both a potentially serious alcohol-medication interaction when using central nervous system agents (Holton et al., 2020), and inadequate knowledge about these interactions. The first causes potentially harmful orthostatism and sedation, and the latter indicates a need for information to older adults about prescription drug safety via a variety of formats (Zanjani et al., 2013).

In summary, the high prevalence of multimorbidity and polypharmacy in the elderly population, psychotropic medications' risk of adverse effects, and the possible lack of information about what medication patients are taking, are all of concern. The aims of the study underlying this chapter were to describe the use of psychotropic drugs in a group of older persons receiving home care service, and to study the relationship between which psychotropic drugs the patients were prescribed, and which medications they were told they were prescribed.

Method

Participants

We invited 462 persons from one medium-sized municipality in south-eastern Norway to participate in the study. The inclusion criteria were: being 60 years or older, and receiving home care service in the municipality. The participants were invited to the study through a personal letter. Subsequently, staff from the home care service called the invited persons to find out if they had received and understood the invitation, if they agreed to participate, and to book time for the assessment. In total, 210 home-dwelling persons with home care service consented to participate, 22 persons were admitted to a nursing home before study start, and 230 persons were not included. The main reason for not participating was that the person or next of kin did not consent (n = 172). Of the 210 participants receiving home care service, two participants did not answer the questions about how well informed they were about psychotropic drug use, and thus we included 208 persons in our study. The participants were included between January 2017 and February 2018. Two research nurses trained in the assessment tools used in the study performed all the data collection.

Data Collection

In addition to information about the prescribed medication, we collected several other variables to explore connections including demographic information. Symptoms of anxiety were assessed with the rating anxiety in dementia scale (Shankar et al., 1999) (score 1–18 points, a score of 12 points or higher is regarded as clinically significant anxiety). Symptoms of depression were assessed using the 5-point version of the geriatric depression scale (Yesavage, 1988) (score 0–5 points, a score of 1 or more points is regarded as clinically significant depression). Cognitive function was assessed using the Montreal cognitive assessment test (Nasreddine et al., 2005) (score 0–30 points, higher scores mean better cognitive function). Physical health was assessed with the general medical health rating scale (GMHR), a four-category scale dichotomized in fair/poor versus

excellent/good (Lyketsos et al., 1999). More information about the other assessment scales, the data collection, and the study is found in a previously published paper by Bergh et al. (2021).

Information about prescribed medications was collected from the patients' medical journals. Prescribed psychotropic medication was categorized according to the anatomical therapeutic chemical (ATC) classification systems into anxiolytics (N05B), hypnotics/sedatives (N05C), and analgesics (N02 + M01A).

To study if the participants were informed about the medications they were prescribed, we asked them three short questions: "Do you use drugs for agitation or anxiety? (yes/no)"; "Do you use sleeping pills? (yes/no)"; and "Do you use painkillers? (yes/no)".

Analysis

Demographic and clinical data are presented as percentages (%) and mean (standard deviation, SD). Prescription of categories of psychotropic drugs are presented as percentages (%). The numbers of participants answering "yes" to the questions about how informed they were about their own medication, are presented as percentages (%). The relationship between the participants' prescribed medication and the participants being informed about taking medication were analyzed using a chi-square test.

The difference between patients being informed about their prescribed medications and patients not being informed was analyzed with a chi-square test and a student t-test, respectively. A logistic regression model with "informed about own medication" as a dependent variable was built, where age, sex, years of education, marital status, physical health, cognition, anxiety, and depression were independent variables.

Ethics

The study was approved by the Regional Committees for Medical and Health Research Ethics (REC), Norway, 2016/1134. Data collection started before the GDPR was launched, and no approval for the institutions'

data protection officer was necessary. Participation was based on informed written consent, from the participants or from their next of kin if the participant lacked the competence to consent. Forty percent of persons receiving home care service in Norway have dementia, while an additional 30% have mild cognitive impairment. A substantial part of these have reduced competence to consent and leaving them out of the research is unethical. Therefore, they were included in the study based on written consent from their next of kin. This procedure was approved by the REC.

Results

Demographic and clinical data are presented in table 1. For the whole cohort, the mean age was 80.7 (SD 8.8) years, 67.3% were women, and 74.0% had fair or poor physical health according to the General Medical Health Rating scale (GMHR).

Table 1. Demographic and Clinical Variables for the Whole Cohort, and for the Groups of Participants "Informed About Their Medication" and "Not Informed About Their Medication"

	All participants (n = 208)	Participants informed about their medication (n = 78)	Participants not informed about their medication (n = 130)	p-value
Woman, number (%)	140 (67.3)	43 (55.1)	97 (74.6)	**0.004**
Age, years, mean (SD)	80.7 (8.8)	80.9 (8.8)	80.6 (8.9)	0.78
Years of education, mean (SD)	10.2 (3.1)	10.0 (3.0)	10.6 (3.2)	0.21
Marital status Unmarried, widow/widower, divorced, number (%)	167 (80.3)	59 (75.6)	108 (83.1)	0.19
Fair/poor physical health (GMHR), number (%)	154 (74.0)	56 (71.8)	98 (75.4)	0.57
Montreal Cognitive Assessment test, mean (SD)	21.5 (6.6), n = 204	20.5 (7.8) n = 76	22.1 (5.7) n = 128	0.12
Geriatric Depression Scale – 5 questions version, mean (SD)	1.4 (1.4)	1.4 (1.3)	1.5 (1.5)	0.72
Rating Anxiety in Dementia, mean (SD)	5.9 (5.4)	5.3 (5.6)	6.2 (5.3)	0.26

SD = standard deviation, GMHR = General Medical Heath Rating scale.

Table 2 describes the proportion of participants informed about what medication they were prescribed, and the proportion of participants prescribed different classes of medication. Twenty-three participants (11.1%) were prescribed anxiolytics, 63 participants (30.3%) were prescribed hypnotics/sedatives, and 63 participants (30.3%) were prescribed analgesics.

Table 2. Reported and Prescribed Medication Use in the Sample

	All participants (N = 208)
Proportion of participants answering "yes" to the question about medication use, number (%)	
Do you use medication for agitation or anxiety?	53 (25.7), n = 206
Do you use sleeping pills?	103 (49.5)
Do you use painkillers?	152 (73.1)
Proportion of participants prescribed medication, number (%)	
Anxiolytic (N05B)	23 (11.1)
Hypnotics/sedatives (N05C)	63 (30.3)
Analgetic (M01A + N02)	63 (30.3)

Tables 3, 4, and 5 present the relationship between the proportions of participants prescribed anxiolytics, sedatives, and analgesics, respectively, and the proportion of participants confirming use of the same classes of drugs (answering "yes" to the questions about use of drugs).

Table 3. Cross-Table for Prescribed and Reported Use of Anxiolytics

	Prescribed anxiolytics		p-value
n = 206	Yes (n = 23)	No (n = 183)	
Do you use drugs for agitation or anxiety?			
– Yes	19 (82.6%)	34 (18.6%)	<0.001
– No	4 (17.4%)	149 (81.4%)	

Chi-square test for categorial data.

Of the 23 participants prescribed anxiolytics (Table 3), four participants (17.4%) answered "no" to the question, "Do you use drugs for agitation or anxiety?", while of the 183 participants not prescribed anxiolytics, 34 participants (18.6%) answer "yes" to the question, "Do you use drugs for agitation or anxiety?" ($p < 0.001$).

Of the 63 participants prescribed sedatives (Table 4), zero participants answered "no" to the question, "Do you use sleeping pills?", while of the 145 participants not prescribed sedatives, 40 participants (27.6%) answered "yes" to the question, "Do you use sleeping pills?" (p<0.001).

Table 4. Cross-Table for Prescribed and Reported Use of Sedatives

n = 208	Prescribed sedatives		p-value
	Yes (n = 63)	No (n = 145)	
Do you use sleeping pills?			
- Yes	63 (100%)	40 (27.6%)	<0.001
- No	0	105 (72.4%)	

Chi-square test for categorial data.

Of the 63 participants prescribed analgesics (Table 5), three participants (4.8%) answered "no" to the question, "Do you use painkillers?", while of the 145 participants not prescribed analgesics, 92 participants (63.4%) answered "yes" to the question, "Do you use painkillers?" (p<0.001).

Table 5. Cross-Table for Prescribed and Reported Use of Analgesics

n = 208	Prescribed analgesics		p-value
	Yes (n = 63)	No (n = 145)	
Do you use pain killers?			
– Yes	60 (95.2%)	92 (63.4%)	<0.001
– No	3 (4.8%)	53 (36.6%)	

Chi-square test for categorial data.

In a logistic regression (Table 6) where "informed about the medication prescribed" was the dependent variable, females had higher odds (OR = 2.35) for being in the group of participants not informed about their medication, and participants with higher scores on the MoCA (better cognitive function) had higher odds (OR = 1.05) for being in the group of participants not informed about their medication.

Table 6. Logistic Regression with Informed About Medication as Dependent Variable, and Sex, Age, Years of Education, Marital Status, Physical Health, Cognition, Anxiety Symptoms, and Depressive Symptoms as Independent Variables

	B (SE)	Odds ratio	p-value
Constant	1.17 (1.95)		0.55
Sex (Ref. = male)	0.86 (0.35)	2.35	**0.02**
Age in years	−0.02 (0.02)	0.98	0.35
Years of education	−0.10 (0.05)	0.90	0.06
Marital status (Ref. = "Unmarried, widow/widower, divorced")	−0.09 (0.40)	0.92	0.83
Physical health, GMHR dichotomized (Ref. = Fair/poor)	0.19 (0.37)	1.22	0.60
Cognition, MoCA	0.05 (0.03)	1.05	**0.04**
Anxiety symptoms, RAID	0.01 (0.04)	1.01	0.85
Depressive symptoms, GDS	−0.03 (0.14)	0.97	0.55

B = unstandardized regression weight, SE = standard error, GMHR = General Medical Health Rating scale, MoCA = Montreal Cognitive Assessment scale, RAID = Rating Anxiety in Depression, GDS = Geriatric Depression scale.

The main findings in our study show that most of the participants prescribed sedatives or analgesics were informed about their prescription, and for which condition the medications were prescribed, while 17.4% of participants prescribed anxiolytics were not informed about the reason for the prescription.

Discussion

The fact that almost one out of five patients prescribed anxiolytics are not aware that they were prescribed medication usually used for agitation and anxiety is of concern, particularly since there are few other indications for the use of it. If you use anxiolytics, and are not aware of it, this may be because of lack of information from the GP and the health care staff, misunderstanding between the GP and the patients due to wording and use of phrases not familiar to the patients, and/or the stigma of psychiatric diseases. Some participants in our study had cognitive decline (mean MoCA score 21.5, SD 6.6), and it is reasonable to believe that some of them may have had home care service to help them remember to take their prescribed medications. Therefore, asking them questions about

what medication they are prescribed may give unreliable answers. This may explain some of the discrepancy between the information about one's own medication through asking the participants, and the information from medical records about their prescriptions. Our results indicate that information to the patients about what medications they are prescribed and why, must be repeated. The GPs and healthcare staff must also use common everyday language that the patients understand, and make sure that the information is understood, as pinpointed by authors referred to in this chapter (Olsen & Andreassen, 2016; Romskaug & Bakken, 2020).

As highlighted by the WHO in their safety action plan for 2021–2030, good quality care should include patient and family engagement, for example, information to and education of patients and families. Moreover, this insures patient safety in clinical processes in primary care and transition of care (WHO, 2021, pp. 13–14). The use of informal care is high in Norwegian municipalities (Skinner, Lorentzen et al., 2020), and education and information relating to prescribed medication must be shared with relatives of patients. This is even more important when the patient has a cognitive impairment. A high proportion (80%) of the participants were either unmarried, widow/widower, or divorced, indicating that they lived alone. However, we do not know this for sure since we did not ask them if they lived alone. In any case, it is highly relevant and important to involve and empower patients and families in relation to prescribed medications since the consequences for all parties are multiple and severe (Romskaug & Bakken, 2020). In addition, where and how information about the patient's medications and prescriptions are stored (i.e., a list of medicines) is important. Is this information only available on a digital medium (e.g., Helse Norge[2]), and/or is it available as a written version in the patient's home? However, since the participants in this study received home care services, the information is stored primarily where the medication is administered. Depending on the locale, the possibility for the health personnel to show and/or remind the patient/the relatives/

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2   Helse Norge is a webpage for national online health services in Norway https://www.helsenorge. no/en/

informal caregivers, or for the parties themselves to obtain this information, is more or less good. This is also an important issue when there are changes to be made in the medication, and a need for medication reconciliation, which is a featured goal for patient safety work in Norway (National Directorate of Health, 2022).

Among the participants not prescribed anxiolytics, sedatives, or analgesics, a high proportion answered "yes" to the questions on whether they used these kinds of medication or not. This can be explained by the fact that we included only medication in the ATC group N05B (anxiolytics), N05C (hypnotics/sedatives), and N02 + M01A (analgesics) in our study, and participants may have been prescribed other medication groups for their anxiety, insomnia, or pain, such as antiepileptics, antihistamines, or antidepressants. Moreover, analgesics are available in stores without a prescription. The latter fact may also contribute to the understanding of why females had higher odds (OR = 2.35) for being in the group of participants not informed about their medications, since 72 out of 93 answers of "not informed about analgesics" came from females.

But it could also be the other way around. Some psychotropic drugs that are usually prescribed for anxiety, insomnia, and/or pain may have other indications. Participants answering "no" to questions about the conditions for which they were prescribed medication, may have been correct. In our opinion, our results, showing that participants that were prescribed medication but answered "no" to questions about taking medication for these conditions, are more reliable than the results showing that participants not prescribed medications but answered "yes" about taking medication for these conditions.

Also mentioned earlier, stigma may be a reason for answering "no" to the question, "Do you use drugs for agitation or anxiety?". Persons with mental illness experience stigma from both inside and outside the health services (Hoel, 2020). Stigma is a barrier to recovery, and stigma is described to be a larger problem for the person with mental illness than the disorder itself (Hoel, 2020). The answer "no" to the questions in our study, may indicate a denial of one's own problems or a fear of being stigmatized. The solution to stigma like this would be more openness. Consequently, contributing to more openness surrounding mental health

issues is an important patient safety task and a follow-up for health personnel. If they recognize or suspect this to be a problem for their patients, they must manage it in a responsible and professional way. What the right solution is must rely on individual considerations based on the patient's needs and condition. Whether the next of kin and/or informal caregiver should be included, is also an individual consideration.

We find it counterintuitive that participants with better cognitive function had higher odds for being in the group of participants not informed about their medications. We expected that participants with cognitive decline would have more trouble remembering what medications they were prescribed. But one possible explanation may be that participants with cognitive decline, because of their cognitive decline had been better informed about the medication they were prescribed.

A key point in this study is not mainly the fear of adverse effects from medication, but that events in administering the medication might lead to adverse effects. Considering persons who might live alone, suffering from cognitive decline in addition to limited knowledge about their own medication, this is not an optimal situation. Hence, more research is needed to map out this complex situation.

An interesting issue is that we can recognize WHO's definition of patient safety as less strict than the one used in Norway. Where WHO refers to "lower risk, reduce the occurrence of avoidable harm, etc." (WHO, 2021), the Norwegian definition specifies "without harm, for every patient and user, always and everywhere" (National Directorate of Health, 2022). This might be a theoretical issue, but worth noting. What are we aiming for in this important work?

Our study has some limitations and some strengths. One limitation is that all participants were recruited from the same municipality, and more than 50% of the invited eligible participants were excluded from the study. This may challenge the generalization of the results. One other limitation is the complexity of indications for medication prescriptions and diseases for which one medication may be prescribed. This has been elaborated earlier in the discussion. We are also aware that persons suffering from psychiatric problems and diseases still experience stigma related to their situation (Gulslett et al., 2014). This might have prevented

our participants from sharing information about their own situation, including what medications they were prescribed, affecting our results.

One strength of the study is that all persons receiving home care service in the included municipality were invited to the study. On the other hand, they were invited to a study with the aim of describing psychiatric symptoms, prescribed medication, and the use of alcohol and illegal drugs. Therefore, persons in the municipality may have declined to take part in the study due to stigma. Another strength of the study was that information about the prescribed medications was collected from the participants' medical records, which is a reliable source of information. We also used internationally recognized assessment tools to collect information about clinical variables, and the two study nurses had received a two-day training period before the data collection, which should result in reliable data for the study.

Closing Reflections

A high proportion of persons receiving home care service are prescribed psychotropic drugs. Although most of them are aware of what medications they are prescribed, our study shows that a significant proportion of persons receiving home care service are not fully aware of the medications they are prescribed. This is a concern regarding patient safety, and it shows that health care personnel should inform their patients more thoroughly, and moreover, repeat information about the medications prescribed. Better knowledge about prescribed medications, will help patients better understand their own diseases and make informed decisions about their own health.

References

Bergh, S., Michaelsen, E., Andfossen, N. B., Lichtwarck, B., Selbæk, G., & Kirkevold, Ø. (2021). Use of alcohol and pharmacological agents in elderly patients receiving home care service in Norway, and association with psychiatric symptoms and cognition. [Bruk av alkohol og vanedannende legemidler hos eldre norske hjemmetjenestemottakere. Sammenheng med psykiske lidelser og kognisjon]. *Tidsskrift for Omsorgsforskning, 7*(3).

Gautun, H., & Syse, A. (2017). Earlier hospital discharge: A challenge for Norwegian municipalities. *Nordic Journal of Social Research*, *8*. https://doi.org/10.7577/njsr.2204

Gulslett, M. K., Kim, H. S., & Borg, M. (2014). Service users' experiences of the impact of mental health crises on social identity and social relations. *Scandinavian Psychologist 1*(2). https://doi.org/10.15714/scandpsychol.1.e2

Hoel, T. L. (2020). *Stigma fører til diskriminering*. [Stigma leads to discrimination]. https://erfaringskompetanse.no/nyheter/stigma-forer-til-diskriminering/

Holton, A. E., Keeney, C., Ryan, B., & Cousins, G. (2020). Prevalence of potentially serious alcohol–medication interactions in older adults in a community pharmacy setting: A cross-sectional study. *BMJ Open*, *10*(8). https://doi.org/10.1136/bmjopen-2019-035212

Lornstad, M. T., Aarøen, M., Bergh, S., Benth, J. Š., & Helvik, A.-S. (2019). Prevalence and persistent use of psychotropic drugs in older adults receiving domiciliary care at baseline. *BMC Geriatrics*, *19*(1), 119. https://doi.org/10.1186/s12877-019-1126-y

Lyketsos, C. G., Galik, E., Steele, C., Steinberg, M., Rosenblatt, A., Warren, A., Sheppard, J.-M., Baker, A., & Brandt, J. (1999). The general medical health rating: A bedside global rating of medical comorbidity in patients with dementia. *Journal of the American Geriatrics Society*, *47*(4), 487–491. https://doi.org/10.1111/j.1532-5415.1999.tb07245.x

Ministry of Health and Care Services. (2006). *St.meld. 25 (2005–2006) Mestring, muligheter og mening – framtidas omsorgsutfordringer* [White paper] [Coping, possibilities and meaning – the Future's Care Challenges]. https://www.regjeringen.no/no/dokumenter/stmeld-nr-25-2005-2006-/id200879/

Ministry of Health and Care Services. (2009). *St.meld. nr. 47 (2008–2009). Samhandlingsreformen: Rett behandling – på rett sted – til rett tid* [White Paper] [The Coordination Reform: Right treatment – in the right place – at the right time]. https://www.regjeringen.no/no/dokumenter/stmeld-nr-47-2008-2009-/id567201/

Ministry of Health and Care Services. (2011). *Health and care services act*. https://lovdata.no/dokument/NL/lov/2011-06-24-30

Ministry of Health and Care Services. (2013). *St.meld. 29 (2012–2013) Morgendagens omsorg* [White paper] [Care of tomorrow]. https://www.regjeringen.no/no/dokumenter/meld-st-29-20122013/id723252/

Ministry of Health and Care Services. (2017). *Lov om Statens undersøkelseskommisjon for helse- og omsorgstjenesten* [Act on the Norwegian Commission of Inquiry into the Health and Care Services]. https://lovdata.no/dokument/NL/lov/2017-06-16-56

Ministry Of Health and Care Services. (2018). *St. meld. 15 (2017–2018) Leve hele livet: En kvalitetsreform for eldre* [White paper] [Live life: A quality reform for older people]. https://www.regjeringen.no/no/dokumenter/meld.-st.-15-20172018/id2599850/

Nasreddine, Z. S., Phillips, N. A., Bédirian, V., Charbonneau, S., Whitehead, V., Collin, I., Cummings, J. L., & Chertkow, H. (2005). The Montreal cognitive assessment, MoCA: A brief screening tool for mild cognitive impairment. *Journal of the American Geriatrics Society*, *53*(4), 695–699. https://doi.org/10.1111/j.1532-5415.2005.53221.x

National Directorate of Health. (2022). *I trygge hender 24-7* [In safe hands 24-7]. https://www.itryggehender24-7.no/om-i-trygge-hender-24-7

Norwegain Commision of Inquiry in Health and Care Services. (2021). *Legemiddel. Saksnummer: Sak 20-00689* [Drug. Case number: Case 20-00689]. https://ukom.no/nyheter/gir-ikke-ut-rapport-om-legemiddelhandtering

Odberg, K. R. (2020). *A human factors approach to medication administration in nursing homes.* [PhD dissertation, University of Stavanger]. https://doi.org/10.31265/usps.48

Olsen, R. M., & Andreassen, S. D. (2016). *Legemiddelbruk og pasientsikkerhet. En oppsummering av kunnskap* [Drug use and patient safety. A summary of knowledge]. Senter for omsorgsforskning. https://www.helsebiblioteket.no/omsorgsbiblioteket/pasientsikkerhet/legemiddelbruk-og-pasientsikkerhet

Romskaug, R., & Bakken, M. S. (2020). *G10 Eldre og legemidler* [G10 Elderly and medicines]. https://www.legemiddelhandboka.no/G10/Eldre_og_legemidler

Shankar, K. K., Walker, M., Frost, D., & Orrell, M. W. (1999). The development of a valid and reliable scale for rating anxiety in dementia (RAID). *Aging & Mental Health*, *3*(1), 39–49. https://doi.org/10.1080/13607869956424

Skinner, M. S., Lorentzen, H., Tingvold, L., Sortland, O., Andfossen, N. B., & Jegermalm, M. (2020). Volunteers and informal caregivers' contributions and collaboration with formal caregivers in Norwegian long-term care. *Journal of Aging & Social Policy*, 1–26. https://doi.org/10.1080/08959420.2020.1745988

Skinner, M. S., Veenstra, M., & Sogstad, M. (2020). Nurses' assessments of horizontal collaboration in municipal health and care services for older adults: A cross-sectional study. *Research in Nursing & Health*, 1–11. https://doi.org/10.1002/nur.22144

Statistics Norway. (2021). *Sjukeheimar, heimetenester og andre omsorgstenester* [Nursing homes, home care services and other care services]. https://www.ssb.no/helse/helsetjenester/statistikk/sjukeheimar-heimetenester-og-andre-omsorgstenester

Sultana, J., Cutroneo, P., & Trifirò, G. (2013). Clinical and economic burden of adverse drug reactions. *Journal of Pharmacology and Pharmacotherapeutics*, *4*(1), S73-S77. https://pubmed.ncbi.nlm.nih.gov/24347988/

WHO. (2009, January). *More than words. Conceptual framework for the international classification for patient safety. Version 1.1.* [Final Technical Report. World Health Organization. https://apps.who.int/iris/handle/10665/70882

WHO. (2021). *Global patient safety action plan 2021–2030: Towards eliminating avoidable harm in health care*. World Health Organization. Licence: CC BY-NC-SA 3.0 IGO. https://www.who.int/teams/integrated-health-services/patient-safety/policy/global-patient-safety-action-plan

Yesavage, J. A. (1988). Geriatric depression scale. *Psychopharmacology Bulletin*, *24*(4), 709–711. https://hdl.handle.net/2027/mdp.39015020992684?urlappend=%3Bseq=1%3Bownerid=39098586-0

Zanjani, F., Hoogland, A. I., & Downer, B. G. (2013). Alcohol and prescription drug safety in older adults. *Drugs, Healthcare and Patient Safety*, *5*, 13–27. https://doi.org/10.2147/DHPS.S38666