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Reichenpfader, U., Wickström, A., Abrandt Dahlgren, M., Carlfjord, S., (2019), 'In the hospital all is taken care of': A practice-theoretical approach to understand patients' medication use, *Sociology of Health and Illness*, , 1-15. https://doi.org/10.1111/1467-9566.12985

Original publication available at:
https://doi.org/10.1111/1467-9566.12985

‘In the hospital all is taken care of’: a practice-theoretical approach to understand patients’ medication use

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Abstract

Drawing from case examples of medication review implementation in three hospital settings in Sweden, this article examines patients’ medication use. Based on a practice theory approach and utilising data from interviews with patients and participant observation, we reconstruct three practices of everyday medication use centring on accepting, challenging or appropriating medication orders. This article argues that patients’ medication practices are embedded in wider practice arrangements that afford different modes of agency. Reconceptualising patients’ medication use from a practice-based perspective revealed the meaning-making, order-producing, and identity-forming features of these practices. Also, we illustrated how different modes of agency were achieved in patients’ medication practices, suggesting a fluidity of both the meanings attached to and the identities related to medication use. Our findings have practical implications as these practices of medication use can be transformed when altering the arrangements they are embedded in, thus going beyond the clinical encounter.

Keywords: practice theory; medication use; qualitative methods; hospital ethnography; agency

Introduction

Medications represent the most common form of medical therapy, and everyday use of prescription and over-the-counter medications has expanded over the last decades (Abraham 2010). The dynamics of such an expansion have been framed as a 'progressive' model of medicine use where the pressures exerted by the pharmaceutical industry along with a growing consumer-oriented culture and patients' requests for medications are insufficiently held in check by regulation and governance strategies (Busfield 2010). In an analogy to the concept of medicalisation (Conrad and Schneider 1980), the concept of pharmaceuticalisation has been proposed, understood as 'the process by which social, behavioral, or bodily conditions are treated, or deemed to be in need of treatment, with medical drugs by doctors or patients' (Abraham 2009). The concept was then broadened, capturing the dynamics of both expansion of and resistance to processes of pharmaceuticalisation and allowing for an examination of the interplay between various actors, structures and practices involved in macro and micro level processes related to medications (Williams *et al.* 2011); as one of the relevant dimensions of these dynamics, Williams *et al.* (2011) refer to the increasing role of patients as consumers and the significance of the lifeworld and practices and meanings connected to everyday medication use. This article takes such a broader view of patients' medication use, drawing attention to the everyday practical accounts of using medications. We argue here that patients' medication use can be better understood when attending to the different ways in which actors, actions and agencies are configured in instances of medication use.

Patients' medication use has been constructed as an *individual* behaviour and framed in terms of patients not following expert recommendations (Stimson 1974; Murdoch *et al.* 2015). Here, discourses of moral concerns and specific expectations of patients' roles and responsibilities have been deployed (Dew *et al.* 2015). Gradually, the notions of adherence

and concordance have been developed as a critique of compliance and its presumption of medical control (Lutfey Spencer 2018). As less asymmetrical models of these relationships evolved, embracing patient-centeredness and increased autonomy, a different patient emerged (Levenstein *et al.* 1986, Szasz and Hollender 1956). Thereby, the ways in which patients and their agency was construed became tied to conceptions of the patient-provider relationship (Armstrong 2014). However, as much of the debate on patients' medication use still centres on the patient-clinician encounter, this confines the analytic gaze to healthcare settings. Therefore, an alternative understanding of processes of medication use is required thereby accommodating more fluid boundaries of medical and health practices between experts and laypersons, humans and materials, or public and private arenas (Clarke *et al.* 2003).

Theorising patients' medication use

Conceptions of patients' medication use that focus on individual behaviour and patient characteristics have been criticised for having an overly narrow and medically-centred orientation (Conrad 1985), a criticism reiterated in different treatment contexts (Huyard *et al.* 2017, Lutfey Spencer 2018). Also, approaches targeting individual medication-taking behaviour have shown limited effectiveness in terms of improved health outcomes (Nieuwlaat *et al.* 2014) as such conceptualisations potentially restrict how health-related activities can be addressed in health research and policy (Cohn 2014).

Concepts of patients' agency have evolved over time, initially connected to the emergence of patient autonomy as an ethical and political principle; subsequently, autonomous patients were expected to be responsible for controlling risk factors, to be vigilant to threats, and to take action as self-caring and self-medicating patients, even outside professional healthcare spaces (Armstrong 2014). Such an agentic perspective, however, remained in line with social cognitive concepts of agency underpinned by the properties of

intentionality, forethought, self-reactiveness and self-reflectiveness (Bandura 2006). Hence, efforts to enhance a patient's capacity to participate in healthcare activities have not been unconditional as they require patients to be both reflexive and responsible, hereby further advancing individualistic notions of autonomy, independence and choice (Armstrong 2014).

Theorising patients' medication use using an alternative perspective, however, needs to problematise not only how actors and agency are conceived, but also how actions are conceptualised. Turning to the action component, patients' medication use can be construed as practices embedded in everyday human life (Rosenfeld and Weinberg 2012). Such perspectives recognise the importance of experiential knowledge and practical dimensions of everyday life where patients engage in medication activities in the context of self-management of chronic illness at home (Corbin and Strauss 1985, Pickard and Rogers 2012). Indicating a transformation with a heightened relevance of non-healthcare settings, the important role of households in healthcare practices was emphasised, portraying the home as a 'hybrid centre of medication practice' where medications are personalised and reconfigured (Dew *et al.* 2014: 28). Also, the centrality of domestic spaces and material objects in enabling medicine-taking work has been illustrated where 'medication infrastructures', entangled with social networks, are established and maintained (Cheraghi-Sohi *et al.* 2015: 82). Medications, then, must be understood as complex objects, socially embedded and deeply integrated into home-making practices and daily household routines (Hodgetts *et al.* 2011). Contrasting social cognition models of medication adherence, the everyday meanings of taking, or not taking, medications have been presented as complex processes which, imbued with diverse moral positions, are accomplished at the intersections of social representations of medications, a patient's identity, and the roles and responsibilities available in a situation (Dew *et al.* 2015).

Thus, there is an analytical potential in broadening the view of medication use, instead of viewing it as a behavioural construct, and thereby, taking into account the 'social, affective, material and interrelational features of human activity' (Cohn 2014: 159). Using a practice-theoretical approach, patients' medication use, then, can be understood and examined as a social practice; such medication practices are conceived as interwoven actions which, albeit individually enacted, are collectively constructed, shared and reproduced (Shove *et al.* 2012).

In this article, we offer an alternative view drawing on case examples of medication review implementation in three hospital settings at two Swedish university hospitals. According to current Swedish regulations and guidelines, medication review involves asking patients about all medications they are taking, assessing the appropriateness of medication therapy, and recommending potential changes; care and treatment should, where possible, be carried out in consultation with the patient and information should be tailored to the patient's needs (Socialstyrelsen 2012). Here, we do not focus on the conduct of medication review but use it as a point of departure for observing patients' medication-related activities in a hospital setting. This article aims to contribute to the understanding of patients' medication use by theorising patients' everyday medication practices. By theorising, we refer to theoretically and empirically exploring the phenomenon. More specifically, we will examine how patients' medication practices are constituted in terms of the competences, meanings and materials involved, and what forms of agency are made possible in these practices. A better understanding of what constitutes and sustains patients' medication practices has implications for how these practices and their relationships to other medication practices can be transformed.

Theoretical framework: practice theory

Practice-theoretical approaches, a family of theories rather than a fully integrated theory, acknowledge the social, historical and structural contexts in which human activity occurs (Nicolini 2012). While there are various practice-related concepts, these approaches share a common interest in understanding social life as located in and emerging from practices as organised and collective human activity, and tightly coupled with and mediated by material arrangements, such as artefacts and objects, but also tools such as language (Reckwitz 2002, Schatzki *et al.* 2001). Practice theories conceive the relationship between structure and agency as recursive, where individual performances of a practice continuously form and reproduce structures and are themselves shaped and transformed by these structures (Warde 2005). Practice-theoretical conceptions, thus, embrace a relational ontology viewing agency not only as being constrained or enabled through social relationships, but also as constituted within these relations (Veenstra and Burnett 2014).

Agency, then, is understood as actors' relationship with other actors, objects, or meanings. Turning around such a relational conception of agency in empirical analysis, it can be examined how actors and agency emerge in a situation 'by looking at the places where it is expressed', but also at the 'specifics of its expression–who, when, where' (Coppin 2008: 50). Viewing agency as a situational accomplishment and foregrounding its dynamic and temporarily emergent character, a practice-theoretical analysis, then, attends to which forms of agency and what kind of actors become possible through specific practices, locating agency as distributed in a network of relations (Pichelstorfer 2017). Practice-theoretical conceptions of agency, in contrast to social theories that construct actors as rule-following or role-performing agents, claim to overcome the division between individual agency and structure (Nicolini 2012). Human agency, thus, is viewed less as a rational, motivation-driven, or norm-following undertaking, but rather as embedded in practices and grounded in

forms of interpreting, knowing how and wanting (Reckwitz 2002). Practice-theoretical approaches, further, expand conceptions of agency in that they do not privilege human agency or its attributes but acknowledge the mutually constitutive relationship between objects and human agents, and, thus of material agency (Pickering 1995, Reckwitz 2002, Shove *et al.* 2012). Driven by research interests to better understand the interrelationship of behaviour and structure related to health inequalities, theoretical frameworks in medical sociology have been proposed aiming to reconceptualize the relationships between structure, context, and agency (Cockerham 2005, Frohlich *et al.* 2001, Scambler 2013, Williams 2003). However, practice-theoretical conceptions do not locate agency in the individual and de-emphasize the role of reflexivity (Delormier *et al.* 2009); instead, agency is understood as entangled with practices, foregrounding the significance of a 'logic of practice'(Bourdieu 1990), and non-propositional and pre-reflective bodily abilities which organize human activity (Schatzki 2012).

Drawing on the framework by Shove *et al.* (2012), which synthesises different practice-theoretical approaches, we examine patients' everyday medication use. According to this framework, practices are conceptualised as the result of the active integration of competences, materials and meanings where no sharp boundaries can be drawn between these practice elements. Building on Schatzki's notion of practical understanding as 'a skill or capacity that underlies activity' (2002: 79), they conceive of competence as the skills, practical know-how and background knowledge, but also the understandings of the situation and of appropriate practice conduct. Competences are understood as resting on socially shared and symbolic meanings, related to both the current practice and past participation in the practice, including conventions or expectations. Here, aspects related to meaning also include ideas of the practice's purpose and benefit, as well as emotions attached to the practice. Last but not least, in addition to competence and meaning, a practice is constituted

by the integration of materials, such as objects, tools and technologies, but also the body. Elaborating on the relationship between human agency and structure, Shove *et al.* (2012) draw on Reckwitz (2002) who understands individuals as 'carriers' of many different practices. 'Carrying' a practice, however, should not be understood as a passive process; rather, it is through practitioners' ongoing performances of practices and different configurations of practice elements that practices are formed and modified. Individuals, therefore, are always producers of change when carrying (out) a practice. New practices can emerge through new combinations of existing or novel practice elements where practice elements can act as 'seeds of constant change' (Warde 2005: 141). Thus, practices and practice elements are never pre-given or static; practices, therefore, can be transformed through re-configuring practice elements or relations between practices instead of changing individual behaviour or practitioners (Shove and Pantzar 2007).

The empirical study

Data used in this article were collected as part of broader ethnographic study exploring the local implementation of medication review in the southeast of Sweden (Reichenpfader *et al.* 2018a, Reichenpfader *et al.* 2018b). Ethical approval was granted by the Regional Ethics Board (ref. 2015/194-31). Medication review was introduced by the Swedish National Board of Health and Welfare as a mandatory service in 2012, to be conducted during each hospital stay or ambulatory care episode, and offered to all patients aged 75 years and older with five and more medications (Socialstyrelsen 2012).

The empirical material used in this article is based on observations conducted at two hospital units (the department of surgery and the emergency department, ED) and semi-structured interviews with patients from three hospital units (the two abovementioned units and a department of orthopaedics) at two regional hospitals. Briefly, observations were

conducted by the first author between October 2015 and January 2017, involving 290 hours of fieldwork on 48 different workdays. Observations included the shadowing of clinicians (physicians, clinical pharmacists, nurse practitioners and nurses) as they carried out day-to-day work activities. A focus was put on healthcare professionals engaging in ward rounds, hand-offs or briefings, but also on clinician-patient encounters (Reichenpfader *et al.* 2018a, Reichenpfader *et al.* 2018b). Further patients were approached at the department of orthopaedics at the same hospital where the surgical department was located.

To be eligible for an interview, patients were required to take at least one regular medication. All patients received oral and written information about the study and interview procedures. Subjects initially willing to participate were subsequently called by the first author to agree upon a date and place. The majority of patients chose to be interviewed at their home, approximately two weeks after discharge. Between November 2015 and November 2017, the first author interviewed 20 patients (18 face-to-face, and 2 telephone interviews; 3 patients recruited from ED, 8 from surgical wards, and 9 from orthopaedic wards; interview duration ranging from 20 to 70 minutes, 7 male, 13 female, age 45-85 years). Although interviews were conducted over a longer period of time, no changes occurred with respect to overall healthcare provision in the study region; specifically, the national and regional policies, as well as the local procedures relevant to medication therapy remained unchanged during this period. Interview topic guides tapped into issues such as patients' views on processes related to medication management at home and in the hospital (how medications were administered, how patients participated in these processes), patients' prior and current medication use (including understanding the purpose of their own medication therapy), their experiences of medication review, and everyday understandings of medication safety.

Thematic analysis was conducted utilising interview and observational data. Thematic

analysis can be used to identify, analyse and report patterns within the data without being tied to a specific theoretical framework (Braun and Clarke 2006). Here we employed an interpretative variant of thematic analysis conceiving of the patterns identified and related to events, meanings, or experiences as socially produced (Braun and Clarke). After careful readings of the entire data, several themes were identified, such as patients' ways of engaging with uncertainties, medication use at home and in the hospital, understandings of 'appropriate ways of being a patient', strategies to interact with healthcare professionals with respect to medications, the role of bodily experiences, and the benefits of medication therapy. Using an iterative approach (Srivastava and Hopwood 2009), the analysis proceeded by engaging with the practice-theoretical framework of Shove *et al.* (2012). Here, we further refined and explored themes using the notions of meaning, competences and materials involved in patients' medication actions. This meant, for example, identifying and comparing instances of using a specific medication (e.g. stopping a certain medication) in terms of knowledges employed (e.g. first-hand experience of information obtained in a similar situation), materials used (e.g. patient information leaflet), and meanings attached to that situation (e.g. the understanding of searching for information on medications as being acceptable). Thus, using this iterative analytic process we theorised patients' medication practices as articulated in patients' interviews about their doings and sayings related to their own and healthcare professionals' medication actions. An important assumption relevant to theorising patients' medication practices at home is that practices can be studied using discussions about practices; examining people's words for activities and practices can provide access to aspects of activities composing a practice, as 'use of words for activities and practices is built into practices' (Schatzki 2012: 24).

To present the empirical material based on observations in this article, we employed an integrative strategy, thereby interweaving interpretation with parts from excerpts in the text

(Emerson *et al.* 2011). Using an integrative textual strategy enabled us to make use of many different single observations where patients participated in field observations. These instances included clinician-patient interactions, such as patients commenting on their medication list, providing information on how they used medications prior to the hospital visit or hospitalization, patients reacting to the administration of medications, discussing medications during or after the ward round, or engaging in medication discussions at discharge. However, irrespective of the textual style, the same methodological principles for selecting fieldnote extracts apply here; thus, the fieldnote extracts chosen and integrated represented important analytic themes, recurring or typical patterns, or concerns relevant to the overall research problem.

Findings

In the following section we show how patients understand and experience medication practices at home and in the hospital. Based on how patients describe their practices and their doings and sayings observed in the hospital settings, these medication practices involved various sets of competences, meanings and materials. Conceiving of the patient as the carrier of practices, each individual patient is 'the unique crossing point of practices' (Reckwitz 2002: 256) and can thus engage in multiple, not necessarily aligned medication practices. Based on our analysis, three distinct patient medication practices, *Receiving and accepting medication orders, Questioning and challenging medication orders* and *Appropriating and monitoring medication orders,* can be described. Following Nicolini (2012), we argue here that these practices take different forms with different modes of agency, depending on the arrangements which allow patients to occupy particular positions.

Receiving and accepting medication orders

Here, patients' medication practices predominantly appeared as silently accepting medication

orders, either directly located in the hospital or closely bound to other healthcare settings. Activities included merely listening to the (often very basic) information provided, usually during nurses' administering of medications. In these practices, competences such as the understanding of the situation and knowledge of appropriately receiving and taking medications in the hospital were integrated. Meanings attached to these practices were viewing the provision of medications as indisputable, something patients had to comply with. This became more accentuated in situations where patients' capacity was impaired by acute bodily states such as pain or sickness. As illustrated below, patients instead carried forward a competing practice, that is, dealing with discomfort and bodily afflictions.

> 'I think it was Alvedon, and then this…Oxy… well, I didn't ask, just didn't… but this is what the nurse said, but I wasn't receptive…just took all tablets and, wasn't receptive to information, only took what I got…I was in so much pain, just slept all the time, the first day…I don't usually do this' (P06)

While in the above extract the patient was unable to pose a question as she was impaired by intense acute pain, not asking questions or simply accepting medications were quite common occurrences in the hospital setting without such an impairment. Here, patients actively integrated emotional or normative engagements related to what to do and how (Warde 2005), such as avoiding challenging a healthcare professional given his or her professional authority and expert competence. Feeding into such medication practices were also symbolic practice elements related to past practices; these included understandings of being the 'exemplary patient', one who was expected to just 'open one's mouth and swallow', and not 'having the required knowledge to ask'. Patients often legitimised such trust and reliance connected to the hospital ward by integrating affective know-how and 'a practice-specific emotionality' (Reckwitz, 2002: 254), referring to themselves as 'exposed', 'totally without control', or 'completely at the mercy of healthcare personnel'. While resorting to 'blind trust' or

deferring to healthcare professionals as authoritative experts was considered the appropriate thing to do in the hospital, patients also offered justifications, for instance such as knowing 'sufficiently enough' to temporarily relinquish control.

Nevertheless, these understandings and the respective medication practices were not exclusively tied to hospital settings. As the following example shows, patients did not see themselves as being in a position to insist on deploying advanced competences, such as knowledge on drug interactions. While this patient actively expressed her doubts, her engagement was passed over amidst the arrangements at hand where an immediate doctor's appointment was not possible.

> 'My hip was aching… it was at the primary care center they recommended, what's it called, I should take Panodil…no, it was Ipren, that anti-inflammatory medicine… the nurse on the phone meant: "Just wait and take Ipren 3 times a day and 2 Panodil", and I asked twice "Are you sure that these are ok with my other meds?";"Yes", she confirmed…but later the doctor said "We use to give such advice … this was just not right for *you*"… so I had to go to the emergency department because these medicines made my blood pressure rise … still, I really trust doctors, it wasn't him… it was someone else' (P01)

In the specific instance above, relevant questions were asked by the patient; things went wrong, explanations were provided, yet trust in the physician was upheld by this patient. The above account illustrates that several practice elements need to be integrated to form a practice; however, this patient's competence of (rightly) suspecting a medication interaction problem went against a competing understanding of the situation, considering it 'the appropriate thing' to trust. It also points to the embeddedness of medication practices in wider practice complexes, where patients' and clinicians' practices reproduce a healthcare system that values medical authority and competence at the expense of patients' knowledge

and involvement (Lupton 2003).

However, material arrangements also shaped medication-related actions and affected agency in healthcare settings. Patients found that the physical environment, shared hospital rooms and little space between beds prevented them from fully engaging with their medications; patients sensed a lack of privacy, which, when combined with understandings of specific medications, such as antidepressants, as potentially 'problematic', made it difficult for them to talk about such medications openly. Also, they felt overwhelmed during ward rounds where they felt 'surrounded' by healthcare personnel, 'staring at them' from above. It was, thus, the combination of materials (rooms without private spaces, arrangements for ward rounds, aching bodies) and competences attached to certain meanings (understandings of the situation, expectations of being a docile patient) that shaped this medication practice and its agency.

Questioning and challenging medication orders

Nevertheless, healthcare settings were also sites where patients engaged in questioning medication orders. Based on previous practices and knowledge related to medications, they actively integrated competences such as embodied knowledge, particularly interpreting current bodily sensations, signs, symptoms or 'events'. Thus, questioning medication orders presupposed that patients actively recognised and made sense of others' medication practices; however, questioning medication orders did not necessarily result in openly challenging them.

> 'I didn't receive my meds on the day of my operation, I think the nurse missed that...my blood pressure and my stomach tablet, those I should have got anyway… but she missed that, I didn't want to ask... thought the nurse was a little messy (laughing), but I thought I can manage without [medications]' (P17)

As the above extract illustrates, both abstract and practical knowledge in the form of knowing one's medications was required here. This also included knowing what one's medications look like. Keeping track of medications was even more demanding for patients taking multiple different medications and, not uncommonly during hospitalisation, when medications were substituted on the ward. In addition to these competences, engaging in this practice also required an understanding of the situation, such as the patient's expectation of receiving certain medications even on the day of surgery. However, the specific knowledge that precisely this type of blood pressure medication had to be suspended on the day of surgery was never shared with the patient. Nevertheless, the patient, despite having doubts, felt confident enough *not* to ask.

Both the above instance and the following account illustrate the notion of participation in and defection from a practice, as well as the interdependent relations between the 'careers' of practitioners and practices (Shove *et al.* 2012). Commitments and orientations in a practice can change at any given point in time so that '[c]ontinued participation and defection are always in tension' (Shove and Pantzar 2007: 156) within an individual 'practitioner'. The patient above could have spoken up, yet she did not. What it takes to 'defect' from the practice, however, is shown in the following account.

> 'I didn't want so much morphine because it made me terribly sick… and the morning after my blood pressure just plummeted… so I was really bad; but then I took away all that morphine tablets, because I knew what they looked like, so it was me who took them away... I think they are too generous with morphine, at night, when the nurse came "Here are your painkillers", I said: "I don't need them, no, thanks!" (P05)

As illustrated above, defections demand other types of 'knowing-how', a motivational know-how and a strong normative engagement of taking responsibility, along with the capacity to stand one's ground. Most of the patients interviewed did not see it as their 'responsibility' to

engage in medication safety in the hospital and, based on observations, such instances were highly uncommon during hospital episodes. However, patients' medication practices can be altered from within, that is, by transforming practice elements while carrying out these practices. Such a transformation is exemplified by the following patient 'career'. The patient (an assistant nurse with several years of professional experience in a nursing home) was adamant about not taking opioid painkillers in connection with her planned orthopaedic surgery and voiced her concerns during a preoperative planning visit. Nevertheless, as shown in the following extract, a reconfiguration of the practice occurred and new links were generated.

> 'God was I in pain! So I got a mix of morphine tablets…my blood pressure got really low, but they took care of that […] so it worked really fine with the pain medications, cause we were able to walk up and down stairs already on the second day […] and they explained to me that I had to be pain-free in order to build up muscles for walking… they want you to get up and go as soon as possible… so that's why it's so important to have good pain medication so that you can exercise… so I got the idea! We all began walking… and it really turned out fine' (P10)

Thus, alterations of practice elements occurred over time, involving the integration of abstract knowledge with embodied knowledge. This also included negotiating these knowledges with healthcare professionals and within the self, hereby questioning, and finally altering meanings of specific medications. This integration could take place as there was a healthcare professional co-participating in these 'negotiations'.

Medication practices portrayed in this second sub-section can be understood as further expanded by integrating a broader range of practice elements: practical interpretations of what to do in specific situations, but also abstract medication knowledge and embodied

experiences along with normative and emotional engagements of how to follow, question, or even openly challenge (medication) orders.

Appropriating and monitoring medication orders

Meanings attached to medication practices at home were underpinned by a strong sense of 'taking over responsibility' for one's health, taking control and taking care of one's medications.

> 'In the hospital all is taken care of... now they come with pills, then you get your meal...so it's first when you come home that you have to take responsibility for yourself, so to say,… in the hospital I took everything, suppose they know what they're doing, didn't question anything' (P15)

Patients discharged after surgery describe their use of pain medications as actively appropriating and re-configuring knowledge; these practices were constituted and stabilised through activities of experimenting and of constantly appraising the consequences of these doings. Appraising necessitated ongoing cycles of observing, monitoring, comparing, documenting and re-evaluating processes and results; monitoring also involved acts of recording where patients diligently documented bodily reactions and signs, functional and affective states, but also types and dosages of medications consumed. Such monitoring and observing could ultimately lead to adapting medication-taking intervals, or, less often, the type of pain medication.

Tapering off post-operative opioid analgesics at home was guided by an orientation towards regaining and strengthening functional and social capacity, and also by heightened caution based on understandings of the risk of opioid addiction. How exactly opioid reduction was carried out by an individual patient depended on the value judgements taken into account; patients attached different levels of importance to being pain-free, having sufficient

energy to get through the day, or enjoying sleep quality. These judgements also varied within the same patient over time. Differences in performances also occurred as practitioners variously enrolled others into their practice, mobilising support from family members or friends, for corroboration and advice in order go on with the practice. As the following extract shows, vigilance with respect to a suspected medication problem was a situated and bodily accomplishment. Again, these competences were based on previous experiences, both embodied knowing and practical how-to-go-on knowing.

> 'No, nobody explained this to me…. I did an internet search …I'm not sure, though, I might have received some information in the hospital and maybe didn't listen…so I read up on how to taper off [opioid medications], there are so many different recommendations… I read in the discharge letter that you should decrease as much as you can tolerate… at home I just reduced the morphine tablets… I remembered having this other foot operation, so I knew how I would react… but, no, nobody told me about these [side effects], but then I remembered that this could happen' (P06)

In these practices, advice on medications was actively sought by the patient, but not routinely provided by healthcare institutions. Knowing how to interpret bodily symptoms or signs related to medication side effects relied on experience, and less often on information provided by healthcare professionals.

The significance of institutions other than the clinic or the patient-clinician encounter is illustrated in the following interview extract, foregrounding non-professional agencies and knowledges.

> 'I didn't know anything before I went to the hospital, except I'd receive pain medications; it's colleagues or friends who also had an operation who tell you what medications they took; no, really, I was quite clueless [...]; before I went home I just got this [medication] list, but this doesn't tell you how you go about reducing pain meds...I

> would have wanted that; in the end I did it on my own [...] but then again, you can't absorb all information you get [...], we are so different, and it's definitely more difficult for an older person; with so much going on in your body… yes, this should really be clearer' (P12)

The above account also brings to the fore that not all practice carriers had equal access to resources, such as competences or a social network. Here, in order to make the discharge summary with information on medications 'work' at home, competences to understand the abstract and de-contextualised information contained in these artefacts required some form of corresponding know-how. Such a 'capacity to decode' (Shove *et al.* 2012: 49) therefore, has to be acquired *in* practice in order to make practices of appropriation or 'individualising' of medication information possible.

Discussion

In this article we examined patients' everyday medication use from a practice-based perspective and showed how different competences, meanings and materials were integrated into patients' practices. The analysis is based on patients' doings and sayings, as observed in two hospital settings, and as produced in interviews. Here, we studied patients' medication use based on three self-selected case examples from a single Swedish region. As this study was embedded in a larger study exploring professional practices when implementing hospital-based medication review, a focus was put on medication use in connection to a recent hospital visit. This, along with the fact that participants were drawn from surgical and acute care hospital units, might affect the transferability of our findings to other contexts, patient groups, or types of medications. However, here we were interested in patients' enactments and general understandings of medication use and an analytical focus was put on the ways in which actors, agencies, and actions related to medication use emerge in specific

situations. Although participation in the interview study was based on a patient's hospital visit and observation data was limited to hospital-based episodes, ample room was given in each interview for exploring patients' understandings and experiences of medication use unrelated to a particular hospital episode.

Drawing on a practice-theoretical view, we focused on common *practice elements* instead of patient attributes, motivations or beliefs to understand patients' medication actions. Patients' practical understandings of how to carry out a practice functioned as 'understanding-enabling knowledge' (Reckwitz 2002: 254). Here, their understandings of the situation, and of embodied, affective and experiential forms of knowledge, as well as their understandings of what was considered acceptable, were central to accomplishing the practice in each situation.

Theorising patients' medication use showed the importance of non-healthcare settings and the temporally evolving character of patients' medication practices. This also resonates with alternative conceptions of patient-orientated decision-making, a relevant aspect of patients' medication practices. Such alternative conceptions challenge individualist and cognitive understandings, suggesting instead temporally, spatially and organisationally unfolding processes, distributed over human and non-human actors, and stretching way beyond the medical consultation (Rapley 2008). What a practice-based perspective adds is a different understanding of patients' agency and the relationship with medication use. Here, we illustrated how different modes of agency were achieved in patients' medication practices, suggesting a fluidity of both the meanings attached to and the identities related to medication use. Thus, we argue here that patients' medication practices carry with them different modes of agency. Such different modes of agency range from practices of active appropriation of medication-related knowledge to forms of agency with a patient not speaking up, or seemingly passively accepting medication orders, the latter employing a mode of 'small

agency' (Honkasalo 2009). Conceiving these different modes of agency, present in different practices yet also in a single patient, presupposes an alternative view of agency. Based on such understandings, patients' agency has to be understood as 'not simply resid(ing) in individual actors, bodies or devices, but rather (being) expressed, or enacted, in networks and webs of relations' (Kazimierczak 2018: 191). Such a relational view points to the connectedness of human action with 'non-human elements of agency' (Jokinen 2016: 87) and its embeddedness in practices and the prevailing arrangements that allow patients to occupy a particular position. These arrangements can be understood as being located within broader practice 'complexes' (Shove *et al.* 2012), such as regulations and policies, institutional structures, discourses or symbolic meanings. It is in these arrangements that practices attract or recruit 'carriers', or make them defect, and that actors, actions and agencies are configured. Based on our analysis, we suggest that the following two practice textures are interwoven with specific modes of agency.

First, healthcare professionals' authority constituted patients' hospital medication practices where patients' agency emerged as 'silent compliance'; the patients in our study were by no means alone in granting healthcare professionals, particularly physicians, special authority based on the perceived 'competence gap' (Lupton 2003: 113). Despite a few exceptions, patients viewed their own knowledge as 'knowing without authority' (Godbold 2013: 62) and were eager to maintain a cooperative stance. Not asking questions was considered the 'right' and decent thing to do, consistent with patients' natural sense of their position in that setting. This was aggravated by patients' bodily states compromising their capacity to engage in questioning or asking questions about medications at the hospital. Similarly, patients who asked questions came to understand their actions as not 'trustfully' following professional (medication) orders; thus, these patients had to muster some strength to 'defect' from the practice of 'accepting medication orders'. Defections came at a price, as

patients had to walk the fine line between taking responsibility and potentially undermining a health professional's authority. These findings align with previous studies indicating that assuming a passive role was perceived as a protective strategy by patients, as they were concerned about being labelled 'difficult' when challenging healthcare professionals (Doherty and Stavropoulou 2012). Taking a 'passive' or deferential stance towards clinicians, however, was found to constrain patients' active engagement in patient safety (Sutton *et al.* 2015). Our findings challenge concepts of patient agency in the current literature on medication review where a knowledgeable and active patient is implicitly presupposed (McTier *et al.* 2015). However, according to current Swedish guidelines on medication review, patients are only expected to contribute to routine medication review mainly by providing information on medication use at admission; also, implementation efforts did not include strategies to promote patient engagement related to medication use during hospitalization (Region Östergötland 2015).

Second, patients face demands for a more active role in self-care at home as care is increasingly shifted from inpatient to outpatient settings (OECD 2018). Based on our observations and interview data, patients were discharged after short hospital stays and were expected to take responsibility for managing post-operative medication therapy at home. However, when patients assume a passive role during hospitalisations and, thus, are not well prepared for taking an active role in managing medications at home, this can affect the quality and safety of medication therapy after discharge (McTier *et al.* 2015). Patients tried to make the most of the written discharge medication list and discharge summary, but had few interactions around medications during the hospital stay or could not recall having talked about specific medications. Considering broader practice complexes and arrangements for understanding patients' medication practices also addresses the issue of considering the clinical encounter as a basic unit of sociological analysis for investigating medical practice,

criticised as taking an overly narrow perspective in the field of medical sociology (May 2007); May argues that by focusing on the dyadic relationship of the medical encounter the wider contexts are left out, thereby disregarding 'how new patterns of knowledge and practice are organisationally framed, reproduced and transformed' (2007: 41).

We have argued in this article that patients' capacity to engage in practices of medication use and the modes of agency made possible are critically connected to the above described practice arrangements. It is in these arrangements that patients' practices of medication use, and the different types of agencies and actors, emerge together. Utilising a practice-based perspective made it possible to reconceptualise patients' medication use, revealing the meaning-making, order-producing and identity-forming features (Nicolini 2012) of practices. Identities, as well as meanings and materials, can then not be assumed to be 'given' or already defined, but are constituted and can be reconfigured in practices. These findings have practical implications, as patients' practices of medication use can only be transformed when altering the arrangements they are embedded in, thus going beyond the clinical encounter.

Acknowledgements

This work was supported by the Swedish Research Council for Health, Working Life and Welfare [Forte 2014-4657], the Medical Research Council of Southeast Sweden [FORSS-476971, FORSS-568651], and the County Council of Östergötland patient safety research fund [Region Östergötlands Medel för Patientsäkerhetsforskning LIO-533151, LIO-626451].

References

Abraham, J. (2009) Partial progress: governing the pharmaceutical industry and the NHS, 1948-2008. *Journal of Health Politics, Policy and Law* 34, 6, 931-977.

Abraham, J. (2010) Pharmaceuticalization of Society in Context: Theoretical, Empirical and Health Dimensions. *Sociology-the Journal of the British Sociological Association* 44, 4, 603-622.

Armstrong, D. (2014) Actors, patients and agency: a recent history. *Sociology of Health & Illness* 36, 2, 163-174.

Bandura, A. (2006) Toward a Psychology of Human Agency. *Perspectives on Psychological Science* 1, 2, 164-180.

Bourdieu, P. (1990) *The logic of practice,* Cambridge: Polity.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 2, 77-101.

Busfield, J. (2010) 'A pill for every ill': Explaining the expansion in medicine use. *Social Science & Medicine* 70, 6, 934-941.

Cheraghi-Sohi, S., Jeffries, M., Stevenson, F., et al. (2015) The influence of personal communities on the self-management of medication taking: A wider exploration of medicine work. *Chronic Illness* 11, 2, 77-92.

Clarke, A.E., Shim, J.K., Mamo, L., et al. (2003) Biomedicalization: Technoscientific transformations of health, illness, and US biomedicine. *American Sociological Review* 68, 2, 161-194.

Cockerham, W.C. (2005) Health lifestyle theory and the convergence of agency and structure. *Journal of Health and Social Behavior* 46, 1, 51-67.

Cohn, S. (2014) From health behaviours to health practices: an introduction. *Sociology of Health & Illness* 36, 2, 157-162.

Conrad, P. (1985) The meaning of medications: another look at compliance. *Social Science & Medicine* 20, 1, 29-37.

Conrad, P. and Schneider, J.W. (1980) Looking at levels of medicalization: A comment on strong's critique of the thesis of medical imperialism. *Social Science & Medicine. Part A: Medical Psychology & Medical Sociology* 14, 1, 75-79.

Coppin, D. (2008) Crate and Mangle. Questions of Agency in Confinement Livestock Facilities. In: Pickering A and Guzik K (eds) *The Mangle in Practice: Science, Society, and Becoming* Durham, NC: Duke University Press, 46-66.

Corbin, J. and Strauss, A. (1985) Managing Chronic Illness at Home: Three Lines of Work. *Qualitative Sociology* 8, 3, 224.

Delormier, T., Frohlich, K.L. and Potvin, L. (2009) Food and eating as social practice - understanding eating patterns as social phenomena and implications for public health. *Sociology of Health & Illness* 31, 2, 215-228.

Dew, K., Chamberlain, K., Hodgetts, D., et al. (2014) Home as a hybrid centre of medication practice. *Sociology of Health & Illness* 36, 1, 28-43.

Dew, K., Norris, P., Gabe, J., et al. (2015) Moral discourses and pharmaceuticalised governance in households. *Social Science & Medicine* 131, Supplement C, 272-279.

Doherty, C. and Stavropoulou, C. (2012) Patients' willingness and ability to participate actively in the reduction of clinical errors: A systematic literature review. *Social Science & Medicine* 75, 2, 257-263.

Emerson, R.M., Fretz, R.I. and Shaw, L.L. (2011) *Writing ethnographic fieldnotes. 2nd ed,* Chicago: University of Chicago Press.

Frohlich, K.L., Corin, E. and Potvin, L. (2001) A theoretical proposal for the relationship between context and disease. *Sociology of Health & Illness* 23, 6, 776-797.

Godbold, N.J. (2013) Tensions in compliance for renal patients - how renal discussion groups conceive knowledge and safe care. *Health Sociology Review* 22, 1, 52-64.

Hodgetts, D., Chamberlain, K., Gabe, J., et al. (2011) Emplacement and everyday use of medications in domestic dwellings. *Health & Place* 17, 1, 353-360.

Honkasalo, M.L. (2009) Grips and Ties: Agency, Uncertainty, and the Problem of Suffering in North Karelia. *Medical Anthropology Quarterly* 23, 1, 51-69.

Huyard, C., Derijks, L., Haak, H., et al. (2017) Intentional Nonadherence as a Means to Exert Control. *Qualitative Health Research* 27, 8, 1215-1224.

Jokinen, E. (2016) Precarious everyday agency. *European Journal of Cultural Studies* 19, 1, 85-99.

Kazimierczak, K.A. (2018) Clinical encounter and the logic of relationality: Reconfiguring bodies and subjectivities in clinical relations. *Health* 22, 2, 185-201.

Levenstein, J.H., McCracken, E.C., McWhinney, I.R., et al. (1986) The patient-centred clinical method. 1. A model for the doctor-patient interaction in family medicine. *Family Practice* 3, 1, 24-30.

Lupton, D. (2003) *Medicine as Culture: Illness, Disease, and the Body in Western Societies,* London; Thousand Oaks, Calif.: SAGE.

Lutfey Spencer, K. (2018) Transforming Patient Compliance Research in an Era of Biomedicalization. *Journal of Health and Social Behavior* 59, 2, 170-184.

May, C. (2007) The clinical encounter and the problem of context. *Sociology-the Journal of the British Sociological Association* 41, 1, 29-45.

McTier, L., Botti, M. and Duke, M. (2015) Patient participation in medication safety during an acute care admission. *Health Expectations* 18, 5, 1744-1756.

Murdoch, J., Salter, C., Poland, F., et al. (2015) Challenging social cognition models of adherence: cycles of discourse, historical bodies, and interactional order. *Qualitative Health Research* 25, 2, 283-294.

Nicolini, D. (2012) *Practice Theory, Work, and Organization. An Introduction,* Oxford, United Kingdom: Oxford University Press.

Nieuwlaat, R., Wilczynski, N., Navarro, T., et al. (2014) Interventions for enhancing medication adherence. *Cochrane Database Syst Rev* 11, CD000011.

OECD. (2018) Average length of stay in hospitals. . In: OECD (ed) *Health at a Glance. OECD Indicators* Paris: OECD Publishing, pp. 167-183.

Pichelstorfer, A. (2017) (Re)configuring actors in practice. In: Jonas M, Littig B and Wroblewski A (eds) *Methodological Reflections on Practice Oriented Theories.* Cham, Switzerland: Springer International Publishing, pp. 79-92.

Pickard, S. and Rogers, A. (2012) Knowing as practice: Self-care in the case of chronic multi-morbidities. *Social Theory & Health* 10, 2, 101-120.

Pickering, A. (1995) *The Mangle of Practice: Time, Agency, and Science,* Chicago: Univ. of Chicago Press.

Rapley, T. (2008) Distributed decision making: The anatomy of decisions-in-action. *Sociology of Health and Illness* 30, 3, 429-444.

Reckwitz, A. (2002) Toward a Theory of Social Practices: A Development in Culturalist Theorizing. *European Journal of Social Theory* 5, 2, 243-263.

Region Östergötland. (2015) Slutrapport Rätt läkemedel [Final report: the right drug]. Linköping, Sweden: Region Östergötland.

Reichenpfader, U., Wickström, A., Abrandt Dahlgren, M., et al. (2018a) 'Our surgeons want this to be short and simple': practices of in-hospital medication review as coordinated sociomaterial actions. *Studies in Continuing Education*, 1-14.

Reichenpfader, U., Wickström, A., Nilsen, P., et al. (2018b) Medi(c)ation Work in the Emergency Department: Making Standardized Practice Work. *Professions and Professionalism* 8, 2.

Rosenfeld, D. and Weinberg, D. (2012) Domestic practice, situated contingency and adherence to medical directives: A call for research. *Social Theory & Health* 10, 1, 42-60.

Scambler, G. (2013) Resistance in Unjust Times: Archer, Structured Agency and the Sociology of Health Inequalities. *Sociology-the Journal of the British Sociological Association* 47, 1, 142-156.

Schatzki, T.R. (2012) A Primer on Practices. Theory and Research. In: Higgs J (ed) *Practice-Based Education: Perspectives and Strategies.* Rotterdam: Sense Publishers, pp. 13-26.

Schatzki, T.R., Knorr Cetina, K. and von Savigny, E. (2001) *The Practice Turn in Contemporary Theory,* London: Routledge.

Shove, E. and Pantzar, M. (2007) Recruitment and Reproduction: The Careers and Carriers of Digital Photography and Floorball. *Human Affairs* 17, 2, 154.

Shove, E., Pantzar, M. and Watson, M. (2012) *The Dynamics of Social Practice. Everyday Life and how it Changes,* Thousand Oaks, CA: SAGE Publications.

Socialstyrelsen. (2012) *Ändring i föreskrifterna och allmänna råden (SOSFS 2000:1) om läkemedelshantering i hälso- och sjukvården [Changes in the provisions and general guidelines on medication management in health care],* Stockholm.

Srivastava, P. and Hopwood, N. (2009) A Practical Iterative Framework for Qualitative Data Analysis. *International Journal of Qualitative Methods* 8, 1, 76-84.

Stimson, G.V. (1974) Obeying doctor's orders: a view from the other side. *Social Science & Medicine* 8, 2, 97-104.

Sutton, E., Eborall, H. and Martin, G. (2015) Patient Involvement in Patient Safety: Current experiences, insights from the wider literature, promising opportunities? *Public Management Review* 17, 1, 72-89.

Szasz, T.S. and Hollender, M.H. (1956) A Contribution to the Philosophy of medicine: The Basic Models of the Doctor-Patient Relationship. *A.M.A Archives of Internal Medicine* 97, 5, 585-592.

Warde, A. (2005) Consumption and theories of practice. *Journal of Consumer Culture* 5, 2, 131-153.

Veenstra, G. and Burnett, P.J. (2014) A relational approach to health practices: towards transcending the agency-structure divide. *Sociology of Health & Illness* 36, 2, 187-198.

Williams, G.H. (2003) The determinants of health: structure, context and agency. *Sociology of Health & Illness* 25, 3, 131-154.

Williams, S.J., Martin, P. and Gabe, J. (2011) The pharmaceuticalisation of society? A framework for analysis. *Sociology of Health & Illness* 33, 5, 710-725.