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Gender stereotyping in medical interaction: a Membership Categorization Analysis

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Abstract
Objective: Gender can be a valuable resource in communication but also a problem, perpetuating gender stereotypes. So far, there has been little attention for how healthcare professionals and patients make gender relevant in medical interactions. The approach of Membership Categorization Analysis (MCA) is particularly pertinent to meticulously analyze gender in medical communication. Applying MCA, this study analyzes how activity descriptions implicitly associated with gender stereotypes, e.g., “carrying a laundry basket up the stairs”, feature in the course of GPs’ explanations of a question or diagnosis. The aim is to provide a new perspective on the relationship between gender and medical interaction, and to increase our understanding of how gender stereotypes are reproduced in the medical setting.
Method: Two cases of GPs using gendered explanations in Dutch general practice interactions are analyzed turnby-turn using MCA.

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Results: The findings show how GPs' descriptions of gendered activities serve the exemplification of technical terms, designed for the specific patient, while also casting the patient in a traditional gender role.
Conclusion: Invoking gender in medical interaction may serve a communicative goal while also perpetuating stereotypes.
Practice implications: Insight in the subtleties of gender construction in medical interactions could enhance gender awareness and sensitivity in healthcare.

1. Introduction

Gender awareness and inclusiveness are growingly important topics in healthcare, and are especially important in communication between healthcare providers and patients. However, what has been largely overlooked by previous research is how gender in this communication features as an aspect of the interaction between the participants. The approach of Membership Categorization Analysis (MCA) offers a perspective and an apparatus to meticulously dissect speakers' collaborative gender construction in social interaction. Studies in this research tradition have shown that gender is a systematic accomplishment of members within a culture, as an aspect of social structure [1] and of communication ('talk-in-interaction') specifically [2]. Using MCA, we showcase how gender is a live aspect of medical interaction, which can be both a valuable resource and a problem, as it may perpetuate stereotypes and (heterosexual and cisgender) norms. Specifically, we examine how gendered activity descriptions, such as "carrying a laundry basket up the stairs", feature in the course of GPs' explanations of a technical term ("exertion"). The aim is to extend the scope of research on the role of gender in medical interaction, and to provide new insights in how gender norms and stereotypes are reproduced in the medical setting [3–5].

The following anecdote illustrates MCA's approach to, and understanding of, gender as a social construct (NRC, March 30, 2021, translation by the first author):

> A locksmith fixes a front door lock. During his work he only spoke to the man living in the house, but he did catch a glimpse of a woman. When he is finished, he calls into the corridor: "Madam, may I use your vacuum cleaner?"

By addressing the request to the woman, the locksmith treats her – rather than him – as the most eligible recipient for this request, despite the fact that there has been no communication between them yet. Because vacuum cleaning is a description of an activity, culturally being associated with "women", he also casts her as the one responsible for housework. But there is more. The fact that a national newspaper published this short story is evidence of how this type gender construction is culturally recognizable, that is, understandable (and potentially laughable) to readers of the newspaper. So the reported locksmith request, directed at the woman in the house, reproduces a gender stereotype and the publication of the anecdote in the newspaper underpins the social, cultural recognizability of the account as gendered, or even sexist. This is what is meant by gender as a "systematic accomplishment" of members of a culture. The stereotype of women as responsible for household labor is not only drawn upon, but also perpetuated with the request (and indirectly again with the newspaper publication). Crucially, this type of gender construction is not restricted to everyday interactions; it also occurs in institutional interaction such as in medical communication [3,4]. The systematics are to be found in the turn-by-turn unfolding of interaction, that is, in turn taking, grammatical construction, lexical choice, but also gaze direction and gesture. The question is what such linguistic gender construction is used to achieve in the medical context.

The approach of Membership Categorization Analysis (MCA) supported by Conversation Analysis (CA) has a rich history in laying open the more and less subtle construction of gender in talk-in-interaction [2,6]. MCA examines how membership categories (such as "male", "white", "straight")

are used by participants in social interaction, either by explicitly naming the category, or more implicitly through inferring attributes or activities conventionally understood as indexing a certain category (“drinking beer”, “attending a nail salon”). It is exactly in its mundane-ness that gendered assumptions and practices are perpetuated: “the more natural, taken-for-granted and therefore invisible the categorization work, the more powerful it is” (p.111) [7]. Central to MCA is the focus on “members’ methodical practices in describing the world, and displaying their understanding of the world and of the commonsense routine workings of society” (p. 47) [8]. With regard to gender, this means that the analytical focus is on “how taken-for-granted ‘facts’ about gender-appropriate behavior and characters are worked out routinely in talk” in the context of general practice consultations (p. 472) [6]. In other words, stereotyped representations and normative assumptions about gender are analyzed for how they emerge from the organizational structures of conversation [9].

In this article, we examine how physicians subtly invoke gender in general practice consultations [6]. In the two cases we analyze, the gender construction occurs in GPs’ exemplifications of medical concepts, through descriptions of recognizably gendered activities. As we show, the GPs’ illustrations display an orientation and sensitivity to the patients who are the recipients of the explanations, as they are in line with the patient’s perceptual gender, specifically “carrying a laundry basket up the stairs”, “watching soccer”, and “brawling five masked men”. Our analysis centrally offers a new perspective on the subtleties of gender construction in medical interactions, and may increase physicians’ awareness of it [3].

2. Methods

2.1. Membership Categorization Analysis and Conversation Analysis

As mentioned above, we use the microanalytic method of MCA supported by CA to analyze gender in naturally occurring GP consultations. Categories may be employed relatively straightforwardly with nouns such as “female”, “man”, “guys” or “slut” [2,6,10]. However, they may also work more indirectly through (descriptions of) attributes or activities that are associated with such categories (“category-bound activities”). In fact, “one can allude to the category membership of a person by mentioning that person’s doing of an action that is category bound” (p. 470) [11]. It is important to note that categories and related activities do not ‘go together’ in a decontextualized way and cannot simply be claimed by the analyst [2]. It is by selecting the woman in the house as the recipient of the request ‘may I use your vacuum cleaner?’ rather than the man who was the interaction partner so far, that gender is invoked. This is not dependent on the analyst’s interpretation. Neither is it the gendered address term (‘Madam’) which makes gender relevant per se. In fact, explicit mentioning of a gender category is neither necessary nor sufficient as evidence for gender relevance [12]. Participants may orient to a category as shaping the conduct at hand despite not being explicitly mentioned [13]. So, the orientations of participants in interactions are privileged as a primary basis for characterizing the context(s) for some conduct under examination [13], which may prove challenging for the analyst. MCA’s premise is that the ‘going together’ of categories and activities “is achieved and is to be found in the local specifics of categorization as an activity” (p. 46) [14]. This analytical focus may, for instance, provide insights in how stereotypes regarding gender and domestic work are perpetuated in everyday interactions [15], or how everyday sexism is challenged [16].

CA is an approach to social interaction which centers on the sequential analysis of interactional phenomena [17]. It is frequently used in combination with MCA to excavate the situated, sequential context of category use [15,16]. One of the most important principles that has been found to drive interaction is recipient design. Recipient design refers to the ways in which talk is designed in ways which “display an orientation and sensitivity to the particular other(s) who are the coparticipants” (p.

727) [18]. Recipient design can be achieved in lexical choice: certain terminology may be selected (or avoided) depending on the speaker's understanding of who the recipient is. In a medical setting, recipient design can be found in selecting the word "flu" versus "viral infection"[19]. Recipient design is also manifested in the way in which questions are designed. For example, the negatively polarized question "do you exercise at all?" rather than "do you exercise?" is recipient designed when it has just been determined that the overweight, hypertensive patient has gained eleven pounds and works at least a sixty-hour week in a restaurant [20]. So, simply put, speakers choose words and otherwise design their talk for the specific other. By implication, this may also cast the recipient as a member of a particular category (e.g., "overweight person").

In this article, we examine how activity descriptions come up and are oriented to as gendered in medical interactions [9]. This means that the analyst's job is to specify how an orientation to gender is consequential for the course of the interaction (p. 133) [21]. According to CA methods, we analyze the sequential position of each gendered activity description within the ongoing interaction, the design and action orientation of the turn in which the category-work appears, and look for evidence for how participants orient to the description [2], which in our case includes recipient design.

2.2. Data and procedure

Based on our interest in the relationship between gender and medical interaction, we initially screened 70 verbatim transcribed consultations from the CATMUS corpus [22] for potential speaker orientations to gender. Four consultations stood out as gender seemed to be "flagged" by descriptions of activities that did not seem "medically" relevant, in contrast to gender-related symptoms such as menopause complaints. For reasons of space and given the journal's relevance to physicians, we chose to analyze the two instances in which the GPs (rather than patients) were using gendered descriptions for further analysis. The two cases are follow-up visits with two different GPs (both male), involving one male patient (43 years old) and one female patient (66 years old) with a male companion. We screened an extra 87 consultations from the corpus, yet we did not find additional cases of physicians invoking a hearable gendered activity (e.g., carrying a laundry basket, brawling. It is known that finding more instances can be quite difficult due to the problem of 'capturability' of categorial phenomena [23]. In fact, single case analyses are recurrent in the MCA tradition [24]; they offer a rich understanding of the subtleties of gender in medical interaction. The two cases we present in this article can be considered as exploratory case studies [17].

The consultations were transcribed using Jefferson's conventions enriched by Mondada's transcription symbols for relevant multimodal conduct [25,26] [Appendix]. The translations were made by the first and second author. For the excavation work of our analytical process, we benefited greatly from data sessions with experienced conversation analysts (a common and recommended practice within this research domain), which led to new insights and enhanced our understanding of the data (p. 140-142) [17].

3. Results

3.1. Analysis

The activity descriptions central to our analysis are "carrying the laundry basket", "watching soccer", and "brawling (attackers)", which occur in the context of the GP explaining a medical term, either in history taking or regarding a diagnosis. In the following, we focus particularly on how GPs invoke these activity descriptions as gendered and how they thereby perpetuate gender stereotypes. Furthermore, we examine what this gender work achieves in terms of medical and interactional goals, highlighting the role of recipient design in selecting examples for the particular patient.

3.2. Case 1

In the first case, the (female) patient's reason for the visit is chest pain. A (male) companion is sitting next to her. The excerpt begins at the point where the (male) GP explores the patient's complaint during the phase referred to as 'history taking' [27]. More specifically, he asks whether the pain increases or decreases during exertion (line 1). Before focusing on the focal lines of our analysis in which gender work occurs (lines 11-12, 16-17, 20), we inspect the sequential context of these descriptions in history taking.

Excerpt 1. Laundry basket

```
1    DOC:      hoe gaat dat dan als u zich aan het inspannen bent?
               how does it go then if you are exerting yourself?
2              als u wat dingen aan het doen bent,
               if you are doing some things,
3               (2.5)
4    PAT:      <nou, blijf er (.) nie- wordt niet slechter,>
               <well, stay(s) there (.) no- does not get worse,>
5    DOC:      okee .hhh dus als je- zou zeggen u heeft dat nare gevoel
               okay .hhh so if you- would say you have that nasty feeling
6              op de borst,
               on the chest,
7    PAT:      °ja°
               °yes°
8    DOC:      .hh en dat maakt eigenlijk niet uit of u zich INSPANT,
               .hh and it actually does not matter whether you EXERT yourself
9              of niet inspant=
               or do not exert yourself=
10   PAT:      =nee [nee.]
               =no [no.]
11   DOC: →        [he, ] als u de TRAP Δopsjou↑wt,Δ ¤met de WASMAND¤
                   [huh,] if you Δcarry Δ ¤the LAUNDRY BASKET¤ up the STAIRS
     pat:                         Δnods-Δ
     doc:                                     ¤makes grip gesture¤
12   DOC: →    >*ik roep maar ΔwatΔ wilds*<=
               >*I just shout ΔsomethingΔ wild*<=
     doc:       *throws hands in the air------*
     pat:                   Δnods-----Δ
13   PAT:      =ja,
               =yeah,
14   DOC:      .hh dan wordt Δhet nie: erger,Δ=
               .hh then it does Δno:t get worse,Δ=
     pat:                     Δshakes head----Δ
15   PAT:      =dan wordt het niet [erger]
               =then it does not get [worse]
16   DOC: →                        [en   ] als u THUIS rustig gew- of
                                     [and ] if you're AT HOME calmly ju- or
17        →    ΔbenedenΔ rustig op de [bank] eh,
               ΔdownstairsΔ calmly on the [couch] eh,
     pat:      Δnods------Δ
18   PAT:                             [ja   ]
                                        [yes   ]
19              [kijk en nou,]
                [look and now,]
20   DOC: →    *[.hh naar    ] VOETBAL* zit te kijken,=
               *[.hh         ] watching SOCCER*,=
     doc:      *gazes + points open palm to companion
     doc:                             *gaze shift back to patient
21   DOC:      =dan wordt het ook weer- dan wordt het niet beter,
               =then it again gets- then it doesn't get better,
22   PAT:      nee want wij zijn op vakantie geweest een paar da:gen,=
               no because we went on holidays a couple of da:ys,=
```

It is the GP's question about the effect of exertion (line 1) which is later rephrased in terms of a recognizably gendered activity. This question is first repaired to a more colloquial, general, and notably vague description of exertion: "if you are doing some things" (line 2). In so doing, the GP orients to a potential lack of intersubjectivity with regard to what the term "exert" entails [19]. The patient's answer (line 4) signals trouble ("well"-prefaced [28], slower pace, intra-turn self-repair [29]) upon which the GP formulates the answer invoking a contrast of exerting versus not exerting (lines 8-9). Despite patient agreement (line 10), the GP offers another formulation, this time orienting to gender (lines 11-21).

The activity descriptions are carrying the laundry basket up the stairs (lines 11-15) as an example of exertion and watching soccer (lines 16-21) as the contrast example of non-exertion. These activities, especially in contrast, are associated with gender stereotypes about domestic work and leisure [15]. Before we further examine how these implicit gender categorizations are made relevant and how they are consequential for the interaction, it is important to note that these descriptions present the activities as routine. The if-then-format of the script formulations ("if you carry the laundry basket up the stairs") presupposes that what is embedded in the if-clause is routine, unquestionable, ordinary [30]. Further, the definite article "the" used both in "the laundry basket" and "the couch" marks these objects as standard ingredients of a household, and thus hearable as ordinary. This implies the activities involving these objects (carrying and sitting) are equally routine and ordinary which implies they are so-called script formulations [30]. So, the activity of climbing up the stairs with the laundry basket is presented not only as a concrete example of "doing some things" (line 2), but also a routine, ordinary example, which similarly holds for the phrase "downstairs calmly on the couch watching soccer" as an exemplification of non-exertion. The routine nature of these activities accords with the implicit gender stereotypes.

The categorization device of gender (but also age) is "perceptually available" (p. 58) [1]. in the sense that the patient is perceivable as a woman (of a certain age) and the companion as a man. The personal pronoun "you" as the agent of the activity ("if you carry") treats the patient as familiar with the concrete and routine experience of carrying the laundry basket. Next, the declarative question "it does no:t get worse" invites the patient to assess whether this routine activity increases her pain. Thus, it treats the patient as knowing the effect of carrying the laundry basket up the stairs. By implication, giving this example of exertion displays sensitivity to the particular patient, hence is recipient designed [18]. But moreover it casts the patient as a potential incumbent of the membership category of which routinely carrying laundry baskets is a feature. Notably, neither the doctor nor the patient or companion use an explicit category label ("woman", "housewife" or yet something else), so we as analysts should not, and do not have to either[2]. Nevertheless, the implicit gender categorization is consequential for the interaction.

First, the consequentiality can be found in the parenthesis "I just shout something wild" with accompanying iconic gesture (line 12). Parentheses have been found to be employed for implicit categorization work before [13]. In this case, it treats the particular activity description as potentially problematic ("wild") and ill-considered or half-cocked ("shout") and thus, arguably, orients to its genderedness. In other words, it accounts for the example as ascribing this gender role to this patient. However, not explicating what is problematic about the given example allows for plausible deniability [31]. Put differently, by not explicitly treating his own talk as, say, sexist (or even apologizing for this specific transgression), the doctor can deny that he was aware of how his example could be interpreted.

The GP's orientation to gender and accountability is further established in the design of his contrast example of non-exertion. As the patient was invited to assess the effect of a routine example of exertion, a contrast routine example of non-exertion is now offered: "and if you're AT HOME downstairs calmly on the couch eh watching soccer" (lines 16-17). While uttering "watching soccer" the GP shifts gaze and points, open palm, at the (male) companion (line 20). The gaze shift is not seeking confirmation from the patient's companion here, as it co-occurs with speech early in the

turn, which is not a moment in which turn allocation is projectable [32]. So, the GP multimodally orients to “watching soccer” as being relevant to the companion, categorizing him as a person who routinely watches soccer (cf. [26,33,34]). Thus, the activities invoked here are constructed as not just contrasting exertion and non-exertion but also normatively illustrating female (the patient) versus male (the companion) activities. The locations (upstairs vs. downstairs on the couch) – being dispensable aspects of the descriptions – maximize the contrast between the activities and thus implicitly also between the genders. More precisely, the non-exertion example aggravates the genderedness of the exertion example. Briefly put, a woman carrying a laundry basket up the stairs is even more “sexist” when meanwhile the man is sitting on the couch watching soccer. Also, as watching soccer is explicitly designed as a male-bound activity (through gaze and gesture), it excludes the patient because she is perceptually female. So, the first example becomes intelligible as inferring the category ‘wife’ as a result of the contrast gendered example. It invokes the pair of ‘husband’ and ‘wife’ and ‘heterosexual married couple’ [4,35] as the relevant structure for the GP’s enquiry. Thus, the patient and companion are ascribed stereotypical gender roles.

The patient does not show any trouble in response to the GP’s gendered explanation. She does not deny the recognizability of the laundry basket example for her, or question the connection with her companion watching soccer. More generally, there is “no questioning of the category selection or of its predicate”, which is typical for categorization work (p. 106) [7], and so the stereotypes are ‘taken for granted’ and pass by ‘unnoticed’ [16]. She aligns with the GP’s question (line 12, 13, 18), despite a brief attempt to get the floor to elaborate in overlap with the GP’s second example (line 19). Hence, the consequentiality of the gender categorization work is exclusively found in the GP’s talk.

To conclude, the descriptions of activities of “carrying the laundry basket up the stairs” and “watching soccer” are used for pursuing an answer to the question whether the patient’s pain on the chest aggravates when exerting, notably after the patient already responded twice to the GP’s initial question. These gendered activity descriptions are recipient designed and notably concrete, that is, depictable and iconic in contrast with the constructions “doing some things” and “exerting yourself”. This renders them useful to exemplify something. Hence, gender stereotypes serve the exemplification of a technical term and relatedly the exploration of the patient’s condition. However, they consequently cast the patient and her companion in traditional, heteronormative gender roles - the woman as routinely doing housework and the man as routinely watching soccer on the couch. This is reflected in the GP’s subtle display of accountability towards the gendering.

3.3. Case 2

The second case involves a male patient diagnosed with fibromyalgia. Prior to this consultation, he was offered a rehabilitation program from a hospital to learn to live with his condition. The reason for his visit now is that he wonders whether he could get different pain medication; he recently ceased his medication because of side effects. It is in response to this request that the GP starts to explain fibromyalgia and the rehabilitation program. Our target activity description is produced in lines 6-8. As in the first case, the gendered activity description is embedded in a formulation invoking its hypothetical (“if”), culturally recognizable character.

Excerpt 2. Brawling

```
1   DOC:    ehm een andere verklaring voor fibromyalgie kan zijn van eh dat je
            ehm another explanation for fibromyalgia can be like eh that you
2           zegt van nou ja ehm (.) als je- eh continu onder STRESS leeft,
            say like well yeah ehm (.) if you- eh continuously live in STRESS,
3           dus je- dus je loopt continu ehm ehm met een net iets hoger
            so you- so you continuously go ehm ehm with a slightly higher
4           stressniveau dan ben je als het ware continu ben je net iets
            stress level then you are if it were continuously slightly more
5           meer aangespannen, omdat je- nou ja dat stresshormoon is ervoor
            tightened, because you- well yeah that stress hormone exists
6       →   om te zorgen dat je als er nu brand ontbreekt dat je dan of
            to ensure that you if a fire breaks out now that you could then
7       →   kunnen vluchten. of dat als er nu eh eh vijf gemaskerde mannen
            flee. or that if eh eh five masked men
8       →   *binnenkomen dat we dan* tegen ze kunnen knokken
            *entered now that we* are able to brawl them then
    doc:    *clenches fists-----*
9   DOC:    *dat we net even dat extra dingetje* hebben,
            *that we just have that extra thing,*
    doc:    *clenches fists--------------------*
10  PAT:    ja
            yes
11  DOC:→   *maar als er dan geen brand is of mannen om tegen te knokken↑*
            *but when there is no fire or men to brawl against↑*
    doc:    *clenches fists----------------------------------*
12  DOC:    en je hebt wel *continu die spanning* dan zijn die [SPIEREN]
            and you do *continuously have that tension* then those [MUSCLES]
    doc:                   *clenches fists------*
13  PAT:                                                       [ja      ]
                                                                   [yes     ]
14  DOC:    continu aangespannen daar- daar kunnen ze ook dan nog eh[- ]↓
            are continuously tightened there- there they can also eh[- ]↓
15  PAT:                                                            [ja]
                                                                    [yes]
16  DOC:    eh kan je PIJNklachten- kan je van geven
            eh can give you PAIN symptoms- can give you
17          dat- dat zou de verklaring kunnen zijn voor die eh voor die zaken
            that- that could be the explanation for these eh for these things
```

We first examine the sequential environment of the gender categorization work. It occurs in the GP's lengthy "different" explanation of fibromyalgia (line 1). The production of this explanation is characterized by frequent in-turn hesitations ("eh" line 1, "ehm" and "eh" line 2, "ehm ehm" line 3), self-repairs (line 2, 3, 5) and hedging ("that you say like", "well yeah", "if it were", "slightly"), indicating the explanation is delicate, which is typical in the context of medically unexplained symptoms like fybromyalgia [36]. The explanation becomes more detailed when the GP starts providing specific examples regarding the function of human stress hormones: they enable one to act if a "fire breaks out" or if "five masked men entered" (lines 6-8). So, the explanation of fibromyalgia is reformulated describing two recognizable events (scripts [30]) which exemplify how the stress hormone works, that is, what having "that extra thing" (line 9) is useful for. Using if-clauses, the GP sketches hypothetical, concrete and culturally recognizable events. It is in this stepwise unfolding of explaining fybromyalgia that gender is made relevant.

While the first example of an extreme activity one might ever face ("if a fire breaks out that you could flee then") deploys a 'non-gendered' "you" (also translatable as "one"), the second script of an iconic, culturally recognizable threatening situation ("if eh eh five masked men entered now that we could brawl them then", lines 7-8) is arguably gendered. The activity of brawling is implicitly

associated with gender similar to carrying a laundry basket. Gender is furthermore implicitly invoked in the pronoun shift.

The projected then-clause involves how “we” would react to the threat of five masked men entering: “we are able to brawl them then” (line 8). As “we” includes the patient, this example is overtly recipient designed. The lexical choice for “brawling” (in Dutch “knokken") rather than, say, “fighting”, is associated with “self-chosen/fun fighting” and “young men/boys” rather than self-defense. Thus, it implicitly invokes gender as a relevant aspect of the activity [2,13], for this patient who is perceivable as a man. Moreover, the GP embodies “brawling” with clenched fists and thus categorizes himself as an incumbent of the membership category of which brawling is a feature. So, the verb “brawl” in combination with “we” as the agent – notably in contrast with the singular “you” in the fire example –construct a hearably gendered ‘we’ [37]. In this way, gender as an omnirelevant device temporarily replaces the doctor-patient categorization device to generate a common-sense account of the patient’s condition (p. 317) [35]. Furthermore, as the fighting scenario instantiates a script it stereotypically ascribes the capacity to brawl to gender, that is, to the category of “man”. This capacity is reformulated in line 9 “that we just have that extra thing”, again using “we” and clenching fists, and thus reinvoking the gender stereotype. The patient produces minimal response tokens (“yes” line 13 and 15), accepting the example of the stress hormone and signaling to the GP to continue. Thus, the patient – like in case 1 – does not display any orientation to the genderedness of the explanation. The projected contrast example (“but” line 11) of when the stress hormone is not functional (“when there is no fire or men to brawl against”), is designed a non-functional stress hormone is the reason for this patient’s complaints is avoided. So, the gender normative ability to brawl is deployed specifically to exemplify the desirable workings of the stress hormone. In other words, gender categorization of patients through inference-rich activity descriptions serves recipient designed explanation of medical information.

4. Discussion and conclusion

4.1. Discussion

Our analysis demonstrates that stereotypically gendered descriptions are employed by physicians to exemplify medical concepts (“exertion”, “stress hormone”) relevant to the phase of the consultation for the specific recipient. The gendered activity descriptions are embedded in if-then-constructions, sketching culturally recognizable, concrete and depictable physical activities and thus rephrasing a question/diagnosis in a more accessible, recognizable way. The descriptions implicitly categorize the patient in a gender role (familiar with doing housework, having the capacity to fight) and thus reproduce (hetero)normative gender ideologies. In other words, these exemplifications work as “locking culture into place” (p. 105) [7]. To some extent, the GPs display accountability for their category-work presenting it as ill-considered in parenthesis, or using hesitation markers. This may be seen as a subtle orientation to the sensitivity of employing normative gender categories [31,38,39]. Nevertheless, the gendered activities appeal to common sense and culturally shared knowledge, and as such function to elicit a fuller account of the complaints or to further explain a diagnosis. Hence, normative gender categorization is a resource for GPs in interaction with their patients.

The medical setting is not assumed to be explanatory for, or determining the interaction [13]; rather, we analyzed how gendered activity descriptions are employed by speakers – in our case GPs – to accomplish particular interactional “work”. GPs use concrete, recognizable examples from everyday life to explain terminology. Gendered examples seem particularly useful in that sense, because the patients’ gender is omnirelevant and perceptually available (like age as yet another device), which renders it a resource. Patients align with GP actions and thus implicitly confirm the gendered examples as recognizable or familiar. So, using gendered stereotypes is a practice which

GPs draw on to do things, such as exemplifying. Regardless of GPs intentions, this practice may be seen as sexist and therefore problematic. Our analysis also indirectly raises the question whether exemplification requires the employment of gender. For instance, the script of being able to flee in case of fire (case 2), used to explain the working of the stress hormone, was not gendered. Notably, the non-gendered explanations and questions in our two cases preceded the gendered ones. Future research should examine whether this order is in any way systematic. Additionally, future studies are encouraged to focus on gender categorization work in medical interactions with LGBTQ+ patients or healthcare providers, where categorization may go less 'unnoticed'.

Our in-depth analysis of two cases suggests that understanding the role of gender as a social, interactional construction in medical communication provided a new perspective on gender in medical communication (see also [3]). Regardless of whether gender is a property of a human body [40] or human behavior/performance [41,42], it is at least also a feature of interaction and a mechanism of social conduct, in medical consultation just like in any other context. Exemplification is likely to be just one activity it operates in. MCA provides a valuable line of enquiry to further elucidate the relationship between gender and medical communication.

4.2. Conclusion

To conclude, our analysis on the basis of MCA and CA reveals some of the subtle aspects of gender and medical communication. Gender categorization in medical interaction may perpetuate gender stereotypes but go as unnoticed and taken-for-granted, as in other domains of social life.

4.3. Practice implications

Gender awareness and sensitivity are increasingly regarded important, also in healthcare [43,44]. Our study using the approach of MCA provides insights in the tacit workings of gender and sexism in medical interaction and may thus enhance gender awareness.

CRediT authorship contribution statement

Wyke Stommel: Conceptualization, Methodology, Validation, Formal analysis, Writing – original draft preparation. Ilona Plug: Conceptualization, Methodology, Data curation, Formal analysis, Writing – original draft preparation, Project administration. Tim C. Olde Hartman: Conceptualization, Resources, Data curation, Writing – original draft preparation, Writing – review & editing. Peter L.B.J. Lucassen: Conceptualization, Resources, Writing – original draft preparation, Writing – review & editing. Sandra van Dulmen: Conceptualization, Resources, Data curation, Writing – original draft preparation, Writing – review & editing. Enny Das: Conceptualization, Writing – original draft preparation, Writing – review & editing, Project administration, Supervision.

Declarations of interest

None.

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Appendix

Definitions of the used transcription symbols, based on Jefferson's conventions and Mondada's symbols for relevant multimodal conduct [25, 26].

Symbol	Definition and use
DOC, PAT, doc, pat	Upper case indicates the performer of the verbal turn, i.e., the general practitioner (DOC) or the patient (PAT). Lower case indicates the performer of the embodied action, i.e., the general practitioner (doc) or the patient (pat).
[word] [word]	Overlapping talk.
=	End of one Turn Construction Unit (TCU) and beginning of next begin with no gap/pause in between. Can also be used when TCU continues on new line in transcript.
(.)	Brief interval, usually between 0.08 and 0.2 s
(2.5)	Time (in absolute seconds) between end of a word and beginning of next.
word	Underlining indicates emphasis. Placement indicates which syllable(s) are emphasized.
wo:rd	Placement wihtin word may also indicate timing/direction of pitch movement.
wo::rd	Colon indicates prolonged vowel or consonant.
<word	Pre-positioned left carat indicates a hurried start of a word, typically at TCU beginning.
word-	A dash indicates a cut-off.
>word<	Right/left carats indicate increased speaking rate (speeding up).
<word>	Left/right carats indicate decreased speaking rate (slowing down).
↑ ↓	Marked shift in pitch, up (↑) or down (↓).
., _ ¿ ?	Markers of final pitch direction at TCU boundary; final falling intonation (.), slight rising intonation (,), level/flat intonation (_), medium (falling-)rising intonation (¿), sharp rising intonation (?).
WORD	Upper case indicates syllables or words louder than surrounding speech by the same speaker.
°word°	Degree sign indicate syllables or words distinctly quieter than surrounding speech by the same speaker.
.hhh	Inbreath. Three letters indicate 'normal' duration. Longer or shorter inbreaths indicated with fewer or more letters.
(word)	Parentheses indicate uncertain word; no plausible candidate if empty.
→	Entered by the analyst to show a sentence of particular interest.
* and ✳	Embodied actions done by GP.
Δ and ▲	Embodied actions done by patient.
------	The action described continues until the same symbol is reached.

References

[1] Jayyusi L. Categorization and the Moral Order. Boston & London: Routledge & Kegan Paul; 1984.

[2] Stokoe E. Moving forward with membership categorization analysis: methods for systematic analysis. Discourse Stud 2012;14:277–303. https://doi.org/10.1177/1461445612441534.

[3] Rossi E. The social construction of gender in medical interactions: a case for the perpetuation of stereotypes? Health Commun 2021;36:1125–35. https://doi.org/10.1080/10410236.2020.1735698.

[4] Kitzinger C. Heteronormativity in action: reproducing the heterosexual nuclear family in after-hours medical calls. Soc Probl 2005;52:477–98. https://doi.org/10.1525/sp.2005.52.4.477.

[5] Ekberg K, Ekberg S. Gendering occupations: persistence and resistance of gender presumptions about members of particular healthcare professions. Gend Lang 2017:11. https://doi.org/10.1558/genl.24082.

[6] Stokoe E. On ethnomethodology, feminism, and the analysis of categorial reference to gender in talk-in-interaction. Sociol Rev 2006;54:467–94. https://doi.org/10.1111/j.1467-54X.2006.00626.x.

[7] Baker CD. Locating culture in action: membership categorization in texts and talk. In: Lee A, Poynton C, editors. Culture and Text: Discourse and Methodology in Social Research and Cultural Studies. London: Routledge; 2000. p. 99–113.

[8] Fitzgerald R, Housley W, Butler C. Omnirelevance and interactional context. Aust J Commun 2009;36:45–64.

[9] Schegloff E. Whose text? Whose context? Whose context. Discourse Soc 1997;8:165–87. https://doi.org/10.1177/0957926597008002002.

[10] Stokoe E. Mothers, single women and sluts: gender, morality and membership categorization in neighbour disputes. Fem Psychol 2003;13:317–44. https://doi.org/10.1177/0959353503013003006.

[11] Schegloff E. Tutorial on membership categorization. J Pragmat 2007;39:462–82. https://doi.org/10.1016/j.pragma.2006.07.007.

[12] Flinkfeldt M, Parslow S, Stokoe E. How categorization impacts the design of requests: asking for email addresses in call-centre interactions. Lang Soc 2021: 1–24. https://doi.org/DOI:10.1017/S0047404521000592.

[13] Whitehead KA. The problem of context in the analysis of social action: the case of implicit whiteness in post-apartheid South Africa. Soc Psychol Q 2020;83:294–313. https://doi.org/10.1177/0190272519897595.
[14] Hester S, Eglin P. Culture in Action: Studies in Membership Categorization Analysis. Washington D.C.: University Press of America; 1997.
[15] Robles JS, Kurylo A. 'Let's have the men clean up': interpersonally communicated stereotypes as a resource for resisting gender-role prescribed activities. Discourse Stud 2017;19:673–93. https://doi.org/10.1177/1461445617727184.
[16] Joyce JB, Humŭ B, Ristimäki H-L, Almeida FF, de, Doehring A. Speaking out against everyday sexism: gender and epistemics in accusations of "mansplaining. Fem Psychol 2021;31:502–29. https://doi.org/10.1177/0959353520979499.
[17] ten Have P. Doing Conversation Analysis; A Practical Guide. London: Sage Publications; 2007.
[18] Sacks H, Schegloff EA, Jefferson G. A simplest systematics for the organization of turn-taking for conversation. Language 1974;50:696–735. https://doi.org/10.2307/412243.
[19] Kitzinger C. Repair. In: Sidnell J, Stivers T, editors. The Handbook of Conversation Analysis. Blackwell Reference Online: Blackwell Publishing; 2013.
[20] Boyd E, Heritage J. Taking the history: questioning during comprehensive history-taking. Commun Med Care Interact Prim Care Physicians Patients 2006:151–84. https://doi.org/10.1017/CBO9780511607172.008.
[21] Wilkinson S. Gender, routinization and recipient design. In: Speer SA, Stokoe E, editors. Conversation and Gender. Cambridge: Cambridge University Press; 2011.
[22] Houwen J, Lucassen P, Stappers H, Assendelft W, van Dulmen S, olde Hartman TC. Improving GP communication in consultations on medically unexplained symptoms: a qualitative interview study with patients in primary care. Br J Gen Pract 2017;67. https://doi.org/10.3399/bjgp17×692537 (bjgp17×692537).
[23] Stokoe E. Doing actions with identity categories: complaints and denials in neighbor disputes. Text Talk 2009;29:75–97. https://doi.org/10.1515/TEXT.2009.004.
[24] Butler CW. Talk and Social Interaction in the Playground. Aldershot, UK: Ashgate; 2008.
[25] Jefferson G. Glossary of transcript symbols with an introduction. In: Lerner G, editor. Conversation Analysis: Studies from the First Generation. Amsterdam and Philadelphia: John Benjamins; 2004. p. 14–31.
[26] Mondada L. Multiple temporalities of language and body in interaction: challenges for transcribing multimodality. Res Lang Soc Interact 2018;51:85–106. https://doi.org/10.1080/08351813.2018.1413878.
[27] Heritage J, Maynard DW. Communication in Medical Care: interaction between primary care physicians and patients. Cambridge: Cambridge University Press; 2006.
[28] Heritage J. Well-prefaced turns in English conversation: a conversation analytic perspective. J Pragmat 2015;88:88–104. https://doi.org/10.1016/j. pragma.2015.08.008.
[29] Schegloff E. Sequence Organization in Interaction: A Primer in Conversation Analysis. Cambrigde: Cambridge University Press; 2007.
[30] Edwards D. Script formulations: an analysis of event descriptions in conversation. J Lang Soc Psychol 1994;13:211–47. https://doi.org/10.1177/0261927×94133001.
[31] Edwards D, Potter J. Discursive psychology, mental states and descriptions. In: Te Molder H, Potter J, editors. Discourse and Cognition. Cambridge: Cambridge University Press; 2005. p. 241–59.
[32] Auer P. Gaze, addressee selection and turn-taking in three-party interaction. In: G. Brône, B. Oben, (eds), Eye-Tracking in Interaction: Studies on the Role of Eye Gaze in Dialogue, (2018), Amsterdam: John Benjamins. pp. 197–232.
[33] Deppermann A, Gubina A. When the body belies the words: embodied agency with darf/kann ich? ("May/Can I?") in German. Front Commun 2021:6.

[34] Mondada L. Pointing, talk and the bodies: reference and joint attention as embodied interactional achievements. In: Seyfeddinipur M, Gullberg M, editors. rom Gesture in Conversation to Visible Utterance in Action. Amsterdam: Benjamins; 2014. p. 95–124.
[35] Sacks H. Lectures on Conversation: Volume I. Malden. Massachusetts: Blackwell; 1992.
[36] Stortenbeker I, Stommel W, olde Hartman TC, van Dulmen S, Das E. How general practitioners raise psychosocial concerns as a potential cause of medically unexplained symptoms: a conversation analysis. Health Commun 2021:1–12. https://doi.org/10.1080/10410236.2020.1864888.
[37] Jackson C. The gendered 'I.'. In: Speer S, Stokoe E, editors. Conversation and Gender. Cambridge: Cambridge University Press; 2011. p. 31–47.
[38] Edwards D, Potter J. Discursive Psychology. London: Sage Publications; 1992. [39] Potter J. Representing Reality; Discourse, Rhetoric and Social Construction. London: Sage Publications; 1996.
[40] Butler J. Bodies that Matter; On the Discursive Limits of Sex. New York, London: Routledge; 1993.
[41] Butler J. Gender Trouble; Feminism and the Subversion of Identity. New York, London: Routledge; 1990.
[42] West C, Zimmerman DH. Doing gender. Gend Soc 1987;1:125–51.
[43] Gattino S, de Piccoli N, Grosso M, Miozzo S, Tanturri G, Rollero C. Awareness of gender medicine among family doctors. A field investigation. J Prev Interv Commun 2020;48:147–60. https://doi.org/10.1080/10852352.2019.1624354.
[44] Verdonk P, Benschop YW, de Haes HC, Lagro-Janssen TL. Medical students' gender awareness. Sex Roles 2008;58:222–34. W. Stommel et al.