GPs’ experiences of managing non-specific neck pain—a qualitative study

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Background. Non-specific neck pain is a common complaint in general practice. Little is known about GPs’ experiences of managing non-specific neck pain.

Objective. This qualitative study aims to elucidate GPs’ opinions on the cause, diagnosis and management of non-specific neck pain and their experiences with patients suffering from this complaint.

Methods. A purposive sample of 19 German GPs was interviewed. Analysis was guided by pre-defined research questions and the general principles of grounded theory. We condensed the data into three key themes.

Results. The first key theme was the aetiology of neck pain and the patients’ difficulty in accepting psychological explanations. GPs reported that their patients asked for definite and expensive forms of therapy. Though GPs preferred cost-efficient forms of therapy, fulfilment of patient expectations was the second key theme. Some felt that satisfying patient wishes may facilitate a trusting relationship so that psychological explanations or advice to adopt an active physical lifestyle would be accepted by patients more open-mindedly. The third key theme was the GPs’ view on orthopaedic surgeons. Sometimes specialist diagnoses helped to reinforce the GPs findings. But many GPs had doubts as to whether an orthopaedic surgeon could tackle psychosomatic aspects of this complaint.

Conclusions. In the case of non-specific neck pain, GPs often feel confronted with patients that demand dubious therapies and fail to consider psychological influences. The prescription of non-evidence-based therapies or referrals does not necessarily reflect a lack of knowledge but the GPs’ strategic decision to improve the doctor–patient relationship.

Keywords. Attitude of health personnel, family practice, non-specific neck pain, qualitative research.

Introduction

About two-thirds of adults will experience an episode of non-specific neck pain at some time in their life.\textsuperscript{1} GPs are often consulted first and they are also responsible for the long-term treatment of neck pain, choosing from a wide array of therapeutic options. Neck pain is frequently managed with a strategy of ‘watchful waiting’ or by referral to a physiotherapist.\textsuperscript{2} The choice of management option depends on illness severity and duration, functional limitations and physician characteristics such as having a special interest in dealing with neck pain or working in a solo practice.\textsuperscript{3} Recently, the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders has recommended exercise training, mobilization, manipulation, acupuncture, analgesics and low-level laser to address neck pain with no signs of serious pathology.\textsuperscript{4} However, the effectiveness of these and related treatment options has not yet been proven.\textsuperscript{5}

By definition, the cause of non-specific neck pain is largely unknown.\textsuperscript{6} Recent studies emphasize the connection between somatic symptoms and psychological perception, especially the prominent role of psychosocial determinants including social support, psychological health or coping strategies over the course and prognosis of neck pain.\textsuperscript{7,8} However, according to the results of our study on neck pain from the patient perspective, patients seem to avoid psychosocial themes when talking about neck pain with their GPs.\textsuperscript{9} Instead of exploring the aetiology, they frequently prefer a pre-defined and mainly somatic oriented therapy.

The frequently unknown aetiology of non-specific neck pain, a lack of effective treatment options and
patients’ high expectations regarding therapy are some of the challenges that GPs face in the management of patients with neck pain. To date, little is known about the GPs’ views and experiences in the management of non-specific neck pain. In this qualitative interview study, we therefore aimed to elucidate the German GPs’ opinions on the cause, diagnosis and management of neck pain and their experience and relationship with patients with non-specific neck pain.

Methods

Context and setting
This study is part of a larger research project on neck pain using quantitative and qualitative components. In brief, the project aimed to provide empirical material on which to found a new practice guideline for the management of neck pain in primary care. The quantitative investigation determined baseline characteristics of participants and their subjective sensation of pain of patients on the basis of the Neck Pain and Disability Scale. We conducted semi-structured interviews with patients and GPs to sound out the possibilities to find common ground. Qualitative and quantitative parts were independent from each other. Further details of this research project and results of the interviews with the patients are reported elsewhere. The research project was approved by the local research ethics committee (no. 17/1105).

Sample and data collection
Based on a large registry that comprised individual data of >400 local GPs, 26 GPs were selected for interviews according to predefined criteria such as gender, urban or rural region and special interests or additional certificates. This sampling strategy was chosen in order to obtain a deeper understanding of the perspective of GPs without a special interest as well as of GPs with a special interest in musculoskeletal and/or psychosocial disorders. Thirteen GPs (50%) agreed to participate. We undertook a preliminary analysis that suggested that female and male GPs had, to some extent, different approaches in the management of non-specific neck pain. To test this assumption on a broader empirical basis, we invited another 13 GPs, mainly females, of which 6 (46%) took part. All interviews were conducted by two of the authors (MW and MS) and took place in the GPs’ practices located in the urban and suburban area around Göttingen, a medium-sized town in Lower Saxony, Germany.

The total sample consisted of 19 GPs (10 female and 9 male, Table 1); the mean age was 51 (range: 37–64) years. All doctors participating in this study were German. On average, interviews lasted ~35 (range: 16–67) minutes. All interviews were digitally recorded, transcribed verbatim and anonymized. According to theoretical sampling, the number of participants was not defined in advance but a result of the preliminary data analysis. Recruitment of participants discontinued on saturation, i.e. when no further information or aspect could be found in the data.

A first interview guide was developed from the research literature. It focused on topics such as the diagnostic and therapeutic strategies and general problems in patient management (Box 1). After the first 13 interviews, we discussed the material and decided to expand the interview guide and included communication problems GPs may face when they address possible psychosocial factors. In order to explore anticipated emerging themes, the interview guide was used flexibly to permit more detailed enquiries.

Data analysis
Data analysis was guided both by predefined research questions and by the general principles of grounded theory in which coding categories were inductively developed from the interview. One of the authors with a background in social sciences (MW) developed an initial coding scheme. The two other researchers (one social scientist and one GP) coded independently two of the interviews and discussed the initial coding scheme afterwards. In case of disagreement, codes and emerging themes were discussed until a consensus was reached. Initial coding was facilitated by computer software (Atlas.ti 5.1). In a second step, we successively tested the categories and refined them to address deviant or negative cases and, finally, condensed these into key themes. This process is analogue to selective coding in grounded theory when a core
category is developed that constitutes the ‘story-line’. Although our analysis was mainly descriptive, we interpreted statements within the team when they were unclear or ambiguous.

Results

Our analysis revealed three key themes: (i) aetiology and diagnostic strategies; (ii) patient expectations and treatment decisions and (iii) ambivalent cooperation with specialists.

Concepts of aetiology and diagnostic strategies

GPs considered physical as well as psychosocial factors as important in the development of non-specific neck pain. Among the ‘physical’ factors, a lack of activity and a poor spinal posture were the most important. They attributed neck pain to individual inactivity and overweight, in the first instance. Most of the interview partners felt certain that activity, e.g. sports, would reduce weight and therefore prevent neck pain effectively. Consequently, they stressed the issue of personal responsibility in the interview, especially in patients who frequently present with chronic neck pain. At the same time, however, the majority of GPs felt uncomfortable addressing the issue of responsibility and recommending a more active lifestyle in the consultation because this may strongly interfere with the patient’s way of living and thus put pressure on the doctor–patient relationship.

And should the Doctor talk about weight reduction, well then he has, uh, no idea, does he? Weight is always there and Grandma is heavier—and a hundred—never had pain and well, that’s the best excuse why you don’t need to reduce weight. (GP 3, male, 37 years.)

Some GPs were more hesitant to blame the patient and considered neck pain a result of civilization and not a personal fault. Frequently these factors were seen as beyond individual control, derived from environmental conditions that cannot be changed.

We are designed to lie on a bearskin or to jog through the Savannah, but not to sit at a desk or in front of the computer. That’s not healthy. (GP 11, male, 64 years.)

In addition to the physical causes, almost all GPs stressed the importance of ‘psychological’ factors in non-specific neck pain. Many of our interview partners emphasized the social and psychological risk factors that individuals in modern societies are exposed to. The emergence of neck pain was often characterized as a ‘natural’ response to stressful working conditions in an achievement-oriented society.

Well, neck pain, like headaches, I think is often a psychosomatic response to the excessive demands in the workplace so that a bit of down-time is required and to not always hold your head between your shoulders or something similar. (GP 10, male, 47 years.)

Of course I have young people that are under pressure. And a clear consequence of this is that many can’t withstand such pressure. (GP 4, male, 63 years.)

Most of the interview partners stated to us that they begin diagnosis by examining possible physical causes. When examination revealed no pathological physical signs, they usually suggested psychosomatic factors as an alternative explanation. Additionally, our interviews suggest that some of the GPs applied a psychological account more often when patients repeatedly present with (chronic) neck pain. Other GPs, mainly female doctors with an additional qualification in psychosomatic medicine, reported a somewhat different strategy: Not only did they consider psychological factors from the outset of the consultation but they also tried to talk with their patients as early as possible about a potential psychosomatic background. In such cases, the GPs intended to show that a psychological cause is just ‘one of many’ and not something to be blamed or stigmatized for.

I talk about that immediately, so that it doesn’t sound like: OK, now that we have excluded everything physical, then it must be psychosomatic, but I always include this possibility and speak about it and always say it could be a result of tension, a strain, lack of exercise or it could be stress, so that I tell the patient from the get go, that they know that the cause may be one of many and that I don’t thereby stigmatize them. (GP 2, female, 40 years.)

Half of the interviewed GPs reported to have difficulties in addressing psychosomatic factors. They felt that many patients were not open to a psychological...
explanation because they experience ‘real’ pain and cannot establish a connection between somatic symptoms and psychological influences.

The patients aren’t actually open to psychosomatic discussions. They say that, it hurts there, it’s not in my head. (GP 10, male, 47 years.)

The requirement that these are physical illnesses is very high because, believe me in their environment this is accepted, while psychological or psychological problems are considered a little crazy, you see? And I believe, um, not as a real illness either, as would be understood by the public. (GP 8, male, 44 years.)

Some GPs pointed out that a careful choice of words (e.g. through use of metaphors) is necessary to make both themselves understandable and explanations acceptable for patients who are not familiar with the possible psychological nature of somatic conditions.

Um, it is an art, to appropriately gauge a patient and possibly also to teach him with somewhat inaccurate medical vocabulary, that his nerves are playing tricks on him. Or that, through his own mistakes, he has mentally maneuvered himself into a dead-end. (GP 4, male, 63 years.)

But there are also other things, (thoughtful, slower talking), whereby neck pain may arise and I ask for example whether [the patient] has a lot going on at the moment ((laughs)). And often it is very, very quickly understood what is implied and this generally promotes a quick reaction, often a very emotional reaction. (GP 7, female, 55 years.)

But in the perception of some GPs, this cautious choice of words is not always enough to find an agreement on the underlying causes of neck pain. They reported that some patients still do not want to alter their view of the complaint. In these situations, the GPs did not insist on their explanation and accepted the patients’ account, which visualized the complaint within a biomedical framework.

What people don’t want, also doesn’t make any sense to do. Someone who doesn’t want psychotherapy shouldn’t be made to take it ((laughs)). That’s counterproductive. (GP 15, female, 60 years.)

More than half of the interviewed GPs stressed the importance of reassurance before providing therapeutic interventions. They hoped that a patient is more relaxed and less demanding if he realizes that nothing serious is wrong with him. On the other hand, our interview partners were eager to show that the patients and their complaints were being taken seriously. For several GPs, a physical examination was appropriate to give the impression that ‘something is being done’.

The role of patient expectations in treatment decisions

GPs in our study reported prescribing tablets most often and also physical therapy or massages. Additionally, they frequently used or offered their patients electric stimulation and superficial injections. As our interviews suggested, the choice of treatment depended on the technical equipment available in their office, the GPs’ additional qualification(s) and their patients’ wishes.

According to our interview partners, many patients asked for definite forms of therapy such as (superficial) injections, massage or physiotherapy. Most GPs took a sceptical view of such interventions, as some of these therapies were not only deemed as inefficient but also represented a considerable burden for their budget. Instead, GPs preferred cost-efficient forms of therapy, such as oral medication or heat rays. But with this on offer, many GPs found it difficult to meet the patients’ expectations. Using the example of massage, one GP reported how resolutely some of her patients enforce their expectations contrary to what she has recommended.

They come with a definite expectation of how their pain is to be treated and would like to have massages because they refuse tablets, and when I say that it is more cost-effective if they initially try tablets, then they are annoyed. They then say, I never need anything and now I’m here, never having had massage, I would like to get massage treatment. Then I say to them, that’s not how it is organized. First when the tablets don’t help and it doesn’t get better, then you can get [massage]. They then of course come back the following week and say it’s not getting better with the tablets and I have to prescribe [massage]. (GP 14, female, 57 years.)

Many GPs felt frustrated by the disparity between patients’ expectations and their willingness to do something on their own. Most GPs were convinced that patients could minimize their risk of neck pain if they change their behaviour and adopt a more active lifestyle. Since almost all GPs regarded physical passivity as an important causal factor in the occurrence of neck pain, they complained of patients who show a passive and consuming attitude.

With such illnesses patients always expect a miracle cure; that they’ll go in to the doctor sick and come out again healthy. Just like bringing a broken car to the garage and it coming out again fixed. (GP 12, male, 53 years.)
In order to avoid conflicts, many GPs seemed to accept and to fulfil patients’ expectations. One GP reported that he has ‘learned’ to step back with his concept of illness and his ideas for treatment. Instead of enforcing his own agenda, this GP tried to fit in with patients’ wishes.

You have to lower your standards, your idea of the illness and impression of his body, and simply accept that the patient is sick and deliver what he would like. (GP 3, male, 37 years.)

On the other hand, the fulfilling of patients’ wishes may not necessarily represent a climb-down. Some GPs felt that satisfying patient wishes may facilitate a trusting relationship, so that at least some patients accept the doctors’ advice. As GP 3 went on to express:

Then [after having lowered your own standards] sometimes patients return again in a consultation, sometimes because of another reason, and say: you talked about Rehabilitation Sport half a year ago. And then they sometimes come around to my opinion. (GP 3, male, 37 years.)

The GPs’ willingness to meet a patient’s expectations sometimes seemed to open the door not only to a more active and responsible behaviour but also to determine the psychosocial problems that may underlie non-specific neck pain. In particular, long-lasting treatment procedures allow doctors to explore and understand their patients’ personal situation and their psychosocial burden.

[The value of a long-lasting relationship] is also the main reason why such exchanges are undertaken, where I continuously try to build a relationship to facilitate an ongoing discussion. And I’m very happy that as a GP with established relationships with patients that I manage to get beyond superficial interactions. (GP 6, male, 46 years.)

**Ambivalent cooperation with specialists**

A frequently emerging pattern from our interviews was that either GPs saw the benefits of cooperation with specialists, especially orthopaedic surgeons, or felt that access to such specialists should be restricted. It was not unusual to find that a GP could entertain either opinion depending on the case. A majority of GPs reported that they rarely issued referrals to neck pain specialists because they did not see the need. In their view, when a referral was made, it was at the request of a patient. However, at least some GPs valued referrals to orthopaedic surgeons, but this was not necessarily for medical reasons. Instead, the role of the orthopaedic surgeon was to provide reassurance and to backup the GPs’ diagnosis.

But when the orthopaedic surgeon also said it’s nothing serious, then the pain also improved. (GP 3, male, 37 years.)

Orthopaedic surgeons were not always considered helpful in facilitating a trusting doctor–patient relationship. Especially those GPs, who drew attention to a possible psychosomatic cause, had serious doubts whether an orthopaedic surgeon represented the right professional to tackle such problems.

I: What role did a referral to an orthopaedic surgeon for neck pain represent to you?

GP 6: More a secondary role because I don’t have the impression that the psychosomatic, psychosocial components would either be considered valuable or come into the discussion. Instead, individual visible findings, imaged findings have a tendency to be over-rated, which with respect to the patients understanding of the illness is not necessarily beneficial. (GP 6, male, 46 years.)

**Discussion**

**Summary of main findings**

GPs in our qualitative study were aware that a variety of factors can cause neck pain and they stressed the role of physical and psychological factors. A major concern was the fulfilment of patient expectations and—if the GPs achieved this—many felt that the doctor–patient relationship had been strengthened. This then facilitated an environment in which GP concerns regarding possible psychological causes or advice to adopt a more active physical lifestyle would be heard and accepted by patients more open-mindedly. Our interviews suggest that female GPs had a slightly different strategy to address psychological factors. Our interview partners had an ambivalent view of orthopaedic surgeons. Sometimes specialist diagnoses helped to reinforce the GPs’ findings and reassure the patient. In other instances they were seen as reductionists not competent with psychological factors.

**Comparison with literature and meaning of the study**

To our knowledge, this is the first qualitative study of GPs’ experiences with non-specific neck pain. While only one study has focused on GPs’ perspectives on whiplash, there is extensive evidence on GPs’ attitudes and management strategies in chronic low back pain and medically unexplained symptoms. In line with these studies, our analysis revealed the potential conflict that may arise when doctors and patients have different explanations and expectations regarding the occurrence and treatment of neck pain. The doctors interviewed in this study seem aware that psychosocial factors are also possible causes of this
complaint, but they typically believed that patients could not view their pain in anything other than physical terms. Based on this biomedical model of explanation, patients frequently demanded a treatment that GPs regard as inefficient. According to Chew-Graham and May, doctors fulfil their patients’ wishes because they felt obliged to ensure an ongoing relationship. Most GPs in our study shared this view and provided their patients’ with the expected, mostly passive somatic therapies. But the fulfilment of patients’ wishes also had a strategic component for some GPs who hoped to build on trust and thereby be able to offer advice on physical activity and psychological issues. This is in line with the well established fact that patient satisfaction is an important determinant of their willingness to comply and cooperate with the GP.

The GPs’ perception that patients frequently asked for somatic treatment can be confirmed by our qualitative interview study with patients suffering from neck pain. In this study, many patients reported to prefer passive treatments such as massages or injections and were not particularly interested in the concrete aetiology of their complaint. These results differ from studies on other diffuse medical conditions such as medically unexplained symptoms. As Ring et al. showed on the basis of audio-recorded registrations, patients with these complaints give more psychological clues than the GPs take up. In such instances, the somatic treatment is oftenfavoured by GPs, whereas the patients request emotional support and explanations. The high agreement between the patient’s expectations and the doctor’s performance in our studies may be a matter of our research method that is limited to what patients and doctors say in interviews. But, on the other hand, non-specific neck pain often allows for a variety of (biomedical) explanations and treatment strategies. Therefore, non-specific neck pain not necessarily constitutes a subgroup of medically unexplained symptoms. Further research on the actual consultation could be useful in reconstructing the real action of patients and GPs in the consultation.

The influence of patient expectations on treatment decisions also raises the question of GPs’ adherence to current guideline recommendations. In a study on GPs self-reported behaviour in consultations for low back pain, doctors found themselves in a dilemma between guidelines that are based on large trial populations and patients’ individual needs. Many GPs from this study were keen to deviate from guideline recommendations in order to ensure patients’ confidence in the therapeutic relationship. Many GPs from our study seemed to be aware of the lack of evidence for the effectiveness of several treatment options. But since the encounter sometimes ended with a prescription for a passive therapy that ran counter to guideline recommendations, we suggest that the doctors’ treatment decisions did not necessarily reflect a lack of knowledge on the effectiveness of interventions. Rather, the social interaction between the GP and the patient influenced the choice of treatment.

Our investigation suggested that some GPs used another strategy to address doctor–patient communication issues and this was to involve the orthopaedic surgeon. However, most of the GPs in our study referred patients to this specialist with some ambivalence. The reason for this was that GPs had the impression that orthopaedic surgeons perceived illness as one dimensional, focusing merely on physical causes. This approach, however, could serve doctors’ aims to reassure patients that nothing is seriously wrong with them. Since most of the GPs participating in our study stated that they did not need specialists help in the management of neck pain, their referrals seemed to involve ‘load-sharing’, a term coined by Clemence and Seamark in their study on GP referrals to physiotherapists. In our case, physicians wanted the specialist to legitimize their diagnosis and to reassure the patient. The referral was often viewed as a means to manage difficult and demanding patients.

**Limitations of this study**

A limitation of this study is the relatively small number of participants. In addition, it is uncertain how transferable our results are since we interviewed GPs from only one area of Germany. Qualitative interview studies with GPs do not aim to give an objective and representative picture of the consultation. It is noteworthy that all GPs with an additional qualification for psychotherapy are female. Since females were more sensitive towards psychosocial factors, it is difficult to decide whether it is ‘gender’ or ‘qualification’ that matters. Unfortunately, we could not find male GPs with an additional qualification in psychology eligible for an interview. This would have been desired to ensure full representation of interview partners from both sexes with a variety of backgrounds.

**Practical implications**

Considering the limitations of our study, the GPs’ self-reported behaviour seems to be not always in accordance with the current recommendations for the treatment of neck pain. Their desire to satisfy patients’ demands has meant conflict with treatment recommendations. This is not only a problem of lack of efficacy, but passive treatments including massage or physiotherapy are also a considerable financial burden. Additionally, doctors should more often keep in mind that neck pain is often self-limiting and does not require extensive management. Instead of offering passive treatments to ensure a positive doctor–patient relationship, less wasteful and cost-effective strategies for treatment may be an alternative. At the same time, doctors should more often provide clear explanations.
for these choices by highlighting physical as well as possible psychological causes.

Conclusion

Although it is mostly a self-limiting and non-serious condition, neck pain often creates a communication and management problem for GPs. GPs in our study believed that many patients demand dubious therapies and fail to consider psychological influences. Future research should investigate in more detail which communication strategies are the best means to find common ground for discussion regarding the cause and meaning of neck pain and its management.

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Declarations

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