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Barrieren und Potentiale der Lebensstilberatung in der Hausarztpraxis – Eine qualitative Untersuchung zu Diabetes Typ 2 und unspezifischen Nackenschmerzen

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Hiermit erkläre ich, die Dissertation mit dem Titel „Barrieren und Potentiale der Lebensstilberatung in der Hausarztpraxis. Eine qualitative Untersuchung zu Diabetes Typ 2 und unspezifischen Nackenschmerzen“ eigenständig angefertigt und keine anderen als die von mir angegebenen Quellen und Hilfsmittel verwendet zu haben.

Göttingen, den …… ……

(Unterschrift)

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1 Einleitung

In Hamburg können Ärzte[1] seit März 2014 ‚Rezepte für Bewegung' ausstellen, um ihre Patienten zu sportlichen Aktivitäten zu motivieren. Auf einem solchen Rezept kann der Arzt dann Hinweise für den Übungsleiter vermerken oder Trainingsschwerpunkte definieren.[2] Diese und ähnliche Initiativen, z.B. zur Förderung einer gesunden Ernährung, spiegeln ein gesteigertes Bewusstsein für die Auswirkungen des Lebensstils auf die Gesundheit wider. Unter dem Begriff des Lebensstils hat die Medizin vor allem Ernährung, Bewegung, Umgang mit (legalen) Drogen, Schlafverhalten und Sexualität gefasst (Easthope und Hansen 2007, S. 8; Yeh und Kong 2013). Neben anderen Ursachen (genetische Prädispositionen, Infektionen, Autoimmunreaktionen, chemische und physikalische Noxen) sehen viele Experten den Lebensstil als einen entscheidenden Faktor bei der Entstehung von Krankheiten. Dies gilt umso mehr für chronische Krankheiten, wie Diabetes Typ 2, Bluthochdruck sowie Krankheiten des Stütz- und Bewegungsapparates. Die in den letzten Jahren gestiegene Prävalenz bei diesen und anderen chronischen Krankheiten ist ein wesentlicher Grund für das wachsende Interesse am Lebensstil in Medizin und Öffentlichkeit (Allin et al. 2004, S. 39).

Für den Arzt ergibt sich aus dieser Perspektive die Aufforderung, bei der Suche nach den Ursachen der Beschwerden auch den Lebensstil, also z.B. Ernährung oder körperliche Aktivitäten seines Patienten in den Blick zu nehmen und ihm gegebenenfalls eine Veränderung seiner Gewohnheiten vorzuschlagen. Gerade der Hausarzt gilt aufgrund seines regelmäßigen Kontakts zum Patienten und der genauen Kenntnis seiner Lebensumstände als besonders geeignet, Veränderungen des Lebensstils zu initiieren (Whitlock et al. 2002). Mehr noch als anderen Akteuren im Gesundheitswesen wird ihm die dafür notwendig erscheinende individuelle ‚Zuschneidung' der Informationen auf den jeweiligen Patienten zugetraut (Wanyonyi et al. 2011; Kreuter et al. 1999).

In der hausärztlichen Praxis trifft die Lebensstilberatung allerdings nicht auf ungeteilte Zustimmung. Einige ausländische Studien führen den Mangel an Zeit und unzu-

[1] Zur besseren Lesbarkeit verwende ich in dieser Arbeit nur die maskuline Geschlechterform, soweit es nicht um Geschlechtsunterschiede geht. Es sind aber selbstverständlich beide Geschlechter gemeint.
[2] Siehe Deutsches Ärzteblatt online, http://m.aerzteblatt.de/news/57857.htm, zuletzt aufgerufen am 28.12.2016.

reichende finanzielle Vergütungsstrukturen als Begründungen für die Zurückhaltung der Hausärzte bei dem Thema Ernährungsberatung und Bewegungsmotivation an (Eakin et al. 2000; Laws et al. 2009). Zudem stellen sich insbesondere beim Lebensstil Zuständigkeitsfragen. So zeigte sich, dass Hausärzte als Akteure auf der Mikro-Ebene des Gesundheitssystems sich oft nur für die akute Krankheitsbehandlung verantwortlich sehen, während sie den Lebensstil als Ziel von politischen Interventionen auf der Makro-Ebene betrachten (Lawlor et al. 2000). Auf der anderen Seite wünschen die Patienten, insbesondere z.B. jene mit Diabetes Typ 2, durchaus eine Lebensstilberatung vom Hausarzt (Ball et al. 2012). Allerdings berichten die Patienten auch von negativen Erfahrungen, vor allem dann, wenn ihr Lebensstil als alleinverantwortlich für ihre Beschwerden gesehen wird oder sie sich beleidigt und bloßgestellt fühlen (Svenningsson et al. 2011).

Während zahlreiche ausländische Studien vorliegen, ist über Lebensstilberatung in deutschen Hausarztpraxen noch wenig bekannt. Dies gilt sowohl für die Perspektive der Hausärzte als auch für die der Patienten. Auf der Grundlage von drei bereits publizierten Untersuchungen zur hausärztlichen Behandlung von Diabetes Typ 2 und unspezifischen Nackenschmerzen geht es daher im Folgenden um die Bedeutung des Lebensstils in der Hausarztpraxis und die Frage, welche Erfahrungen Hausärzte und ihre Patienten mit der Lebensstilberatung gemacht haben. Darüber hinaus sollen – auch wenn zum Thema Nackenschmerzen ausschließlich Hausärzte, zum Thema Diabetes Typ 2 dagegen nur Patienten interviewt wurden – grundsätzliche Schwierigkeiten der (haus-)ärztlichen Lebensstilberatung herausgearbeitet und auf dieser Grundlage mögliche Verbesserungen beschrieben werden.

2 Lebensstil als kausaler und therapeutischer Faktor

2.1 Unspezifische Nackenschmerzen

Mit einer Jahresprävalenz von 29-34% sind Nackenschmerzen ein häufiger Konsultationsanlass in der Hausarztpraxis (Hogg-Johnson et al. 2009). Die Wahrscheinlichkeit, im Laufe des Lebens an Nackenschmerzen zu leiden, beträgt einer skandinavischen Studie zufolge etwa 50% (Bovim et al. 1994). Nur in 1% der Fälle sind Nackenschmerzen das Symptom einer schwerwiegenden Grunderkrankung, wie z.B. eines ZNS-Tumors, einer Infektion oder einer intra-/extrazerebralen Blutung (Heller et al. 1983). In der überwiegenden Mehrzahl der Fälle ist keine spezifische Ursache auszumachen. Diese Fälle sollen im Folgenden als unspezifische Nackenschmerzen bezeichnet werden. Trotz der unklaren Ätiologie können degenerative Prozesse der Halswirbelsäule, psychosoziale Belastungen, Haltungsfehler und muskuläre Dysbalancen als Einflussfaktoren für die Entstehung der Beschwerden genannt werden (Bot et al. 2005).

Bedingt durch die oft nicht auszumachende Ursache und durch den in der Regel selbstlimitierenden Charakter der Beschwerden liegen nur wenige Empfehlungen zur Behandlung von unspezifischen Nackenschmerzen vor. Die bis 2014 gültige Leitlinie der Deutschen Gesellschaft für Allgemeinmedizin und Familienmedizin (DEGAM) trägt diesem Umstand Rechnung und konstatiert, dass im „Spannungsfeld zwischen Patientenwunsch, eigenen Vorstellungen, Budgetierung und Evidenz vielfach Kompromisse erforderlich“ sind (Leitlinie Nackenschmerzen 2009, S. 27). Durch Studien fundierte Empfehlungen lassen sich dabei vor allem für physiotherapeutische, muskelkräftigende Therapieansätze finden, die auch als Heimtraining wirksam sind (Zronek et al. 2016). Regelmäßiges Training von Muskulatur, Ausdauer und Koordination führt dabei zu dauerhafter Beschwerdelinderung. Für die medikamentöse Schmerztherapie empfiehlt die DEGAM-Leitlinie – in Ermangelung spezifischer Wirkbelege – das WHO-Stufenschema. Lediglich für die Injektion von Lidocain in die myofaszialen Triggerpunkte liegt ein Wirknachweis vor, allerdings nur in Kombination mit Dehnungsübungen (Leitlinie Nackenschmerzen 2009, S. 38).

Körperliche Bewegung und Kräftigung der Muskulatur sind also wichtige Elemente in der Therapie und der (Sekundär-)Prävention von Nackenschmerzen. Lebensstilmodifikationen können daher einen wichtigen Beitrag zur Bekämpfung der Beschwerden leisten und sind damit auch im Kontext der hausärztlichen Behandlung von großer Bedeutung.

2.2 Diabetes Typ 2

Diabetes Mellitus Typ 2 (in dieser Arbeit bezeichnet als Diabetes Typ 2) gilt als Prototyp einer durch den Lebensstil hervorgerufenen Erkrankung. So spielen genetische Faktoren und das reine Lebensalter zwar eine nicht unerhebliche Rolle, jedoch beruht die Entstehung der Erkrankung sowie der typischen Folgeerkrankungen in vielen Fällen auf einer langandauernden hyperkalorischen Ernährung in Kombination mit einem Mangel an Bewegung (Marx 2002). Aufgrund seiner Prävalenz von etwa 7% (Leitlinie Typ 2 Diabetes 2014, S. 70) wird Diabetes Typ 2 oft als die ‚Zivilisationskrankheit' schlechthin charakterisiert.

Die nationale Versorgungsleitlinie berücksichtigt den enormen Einfluss des Lebensstils in der Krankheitsgenese und empfiehlt als ‚Basistherapie' nicht-medikamentöse, lebensstilmodifizierende Maßnahmen. Besondere Berücksichtigung findet die Änderung des Ernährungs- und Bewegungsverhaltens durch ein „strukturiertes, evaluiertes und zielgruppen- und themenspezifisches Schulungs- und Behandlungsprogramm" (Leitlinie Diabetes Typ 2 2014, S. 36). Aber auch dem Hausarzt schreibt die Leitlinie eine wichtige Rolle bei der Grundversorgung, zu der sie unter anderem die „Untersuchung und Beratung des Patienten" (Leitlinie Typ 2 Diabetes 2014, S. 65) zählt, zu.

Bei aller Heterogenität in der konkreten Ausgestaltung weisen diabetesspezifische Schulungsprogramme ein hohes Maß an Evidenz auf (Boren et al. 2009; Norris et al. 2002; Moore et al. 2004). Dies gilt vor allem für die unter dem Stichwort ‚Empowerment' bekannten Ansätze, die darauf abzielen, Wissen, Anwendungsfähigkeiten und Motivation der Patienten zu fördern. Der Effekt dieser Maßnahmen zeigt sich dabei sowohl in einer Änderung der entsprechenden Laborparameter – hier ist vor allem der Anteil des an Glukose gebundenen Hämoglobins (HbA1c) zu nennen – als

auch in der verminderten Wahrscheinlichkeit von Folgeerkrankungen, wie z.B. dem diabetischen Fußsyndrom oder der diabetischen Retinopathie (Mulcahy et al. 2003; Clement 1995).

Strukturierte Schulungsprogramme sind natürlich nicht gleichzusetzen mit hausärztlicher Lebensstilberatung im Rahmen der Routineversorgung. Während die Schulungsprogramme oft mehrere Stunden in Anspruch nehmen und mit dem Einsatz von Lehrmaterialien verbunden sind, findet die hausärztliche Lebensstilberatung in der Regel während der Sprechzeit im Rahmen einer Konsultation statt. Wie der Lebensstil dabei konkret modifiziert werden soll, bleibt vage. In der entsprechenden Versorgungsleitlinie heißt es nur, dass die Beratung vom individuellen Kontext der Patienten, wie etwa seiner bisherigen „Ernährungsroutine“ (Leitlinie Diabetes Typ 2 2014, S. 38), abhängt. Hausärzte und ihre Patienten haben also einen großen Spielraum bei der Definition von Behandlungszielen und der Wahl der hierfür nötigen Maßnahmen.

3 Fragestellung

Mit Blick auf die Empfehlungen der Leitlinien scheint an der zentralen Bedeutung des Lebensstils für die Krankheitsbilder Diabetes Typ 2 und unspezifische Nackenschmerzen kein Zweifel zu bestehen. Trotz der zahlreichen Wirknachweise von Lebensstilmodifikationen und der immensen Rolle des Lebensstils in der Ätiologie der Beschwerden ist über die Ausgestaltung der Lebensstilberatung in der hausärztlichen Routineversorgung wenig bekannt. Konkret stellt sich die Frage, wie Hausärzte und Patienten Lebensstilberatung erleben und welche Schwierigkeiten dabei auftreten. Daher sollen im Folgenden Ergebnisse der **Publikationen I**, **II** und **III** kondensiert vorgestellt werden. Abschließend soll diskutiert werden, welche Strategien geeignet sind, Lebensstilberatung als festen Bestandteil der hausärztlichen Behandlung zu etablieren und in der Wirksamkeit zu steigern.

4 Materialien und Methoden der Publikationen

Die vorliegende Arbeit basiert auf drei im Zeitraum von 2010 und 2016 publizierten Studien zu den Themen Nackenschmerzen (**Publikation I**) und Diabetes Typ 2 (**Publikation II** und **Publikation III**). Im Folgenden sollen der Kontext der Studien sowie die ihnen zugrundeliegenden Methoden kurz vorgestellt werden.

4.1 Publikation I: Unspezifische Nackenschmerzen

Die Erfahrungen von Hausärzten bei der Behandlung unspezifischer Nackenschmerzen bilden den Gegenstand der in **Publikation I** veröffentlichen Untersuchung. Die Studie versteht sich als empirisch fundierter Beitrag zur Leitlinie ‚Nackenschmerzen' der DEGAM. Als Grundlage für die Untersuchung dienten 19 Leitfadeninterviews mit Hausärzten aus der Stadt Göttingen und Umgebung. Die Auswertung orientierte sich an den Grundprinzipien der Grounded Theory. Als qualitative Erhebungs- und Auswertungsmethode folgt diese einem induktiven Ansatz, nach welchem möglichst offen, d.h. nicht durch Vorannahmen beeinflusst, Konzepte und Kategorien aus den Daten gebildet werden (Strauss und Corbin 1996). Hierfür werden die Interviews zunächst mithilfe einer Kodiersoftware (Atlas.ti) kodiert. Die dabei gebildeten Codes benennen und bündeln die Inhalte der Interviews und stellen in ihrer Abstraktheit die Grundlage für die sich daran anschließenden Vergleiche der einzelnen Textstellen dar. Im nächsten Schritt wurden die Codes zu Kategorien zusammengefasst und gruppiert, so dass am Ende nur noch einige wenige Kernkategorien standen, die sich durch die Masse der Interviews zogen und damit als besonders relevant gelten können.

4.2 Publikationen II und III: Diabetes Typ 2

Die Erhebung und Auswertung der Interviews mit Patienten für die **Publikationen II** und **III** fand im Rahmen des Internet-Projektes www.krankheitserfahrungen.de statt. Das Ziel der Website, die auf einer Zusammenarbeit zwischen dem Institut für Allgemeinmedizin der Universitätsmedizin Göttingen, dem Institut für Public Health der Universitätsmedizin Berlin und dem Institut für Psychologie der Universität

Freiburg beruht, ist die Bereitstellung von unabhängigen Informationen zu verschiedenen Krankheiten und Erfahrungsberichten von unmittelbar betroffenen Personen (Lucius-Hoene et al. 2013). Zum Thema Diabetes lagen 35 Interviews in Form von Video- oder Audioaufzeichnungen mit Diabetes-Patienten aus Deutschland vor. Für **Publikation II** wurden alle 35 Interviews, für **Publikation III** 14 Interviews genutzt. Durch die Verwendung einer narrativen, d.h. erzählgenerierenden Interviewtechnik sollte es den Interviewpartnern ermöglicht werden, das Interview selbst zu steuern und die für sie relevanten Aspekte zur Entfaltung zu bringen. Die Auswertung der Daten erfolgte erneut nach dem Prinzip der Grounded Theory bzw. nach einer daran angelehnten Methodik.

5 Ergebnisse der Publikationen

Ein gemeinsames Thema der hier vorgestellten Studien ist die Lebensstilberatung durch Hausärzte bzw. ihre Versuche der Modifikation. Auch wenn sich Interviewpartner, Erhebungsmethoden und Krankheitsbilder unterscheiden, eignen sich die drei Publikationen – gewissermaßen als exemplarische Fallstudien – zum Vergleich der Wahrnehmungen, Einstellungen und Erfahrungen von Ärzten und Patienten. Anhand von zwei häufigen Beschwerdebildern in der Hausarztpraxis lässt sich Lebensstilberatung als wesentliches Element hausärztlicher Praxis in ihrem Potential, aber auch in ihren Widersprüchlichkeiten fassen. Die Ergebnisse der Studien werden nach den Gesichtspunkten (1) Anwendungsgebiete, (2) Barrieren bei der hausärztlichen Lebensstilberatung und (3) Potentiale für Lebensstilmodifikationen vorgestellt.

5.1 Anwendungsgebiete der Lebensstilberatung

Der Lebensstil spielt den Interviewpartnern zufolge sowohl in der Behandlung von unspezifischen Nackenschmerzen als auch von Diabetes Typ 2 eine wichtige Rolle. So wird von allen interviewten Personen betont, dass Ernährungs- und Bewegungsgewohnheiten einen entscheidenden Einfluss auf das jeweilige Beschwerdebild haben. Hausärzte und Patienten haben allerdings die Erfahrung gemacht, dass der Lebensstil ein problematisches Thema in der hausärztlichen Praxis sein kann. Das ändert nichts daran, dass beide Parteien den Lebensstil als bedeutsamen Faktor bei der Genese der jeweils thematisierten Erkrankungen betrachten, seien dies schmerzhafte muskuloskelettale Beschwerden oder Stoffwechsel-Krankheiten. So bezeichnet etwa ein Hausarzt den aktiven Lebensstil als natürlich, während der moderne, vor allem passive Lebensstil als ungesund charakterisiert wird.[3]

> Wir sind halt konstruiert dafür, auf dem Bärenfell zu liegen oder durch die Savanne zu joggen, aber nicht am Schreibtisch zu sitzen oder vor dem Computer. Das ist nicht gesund. **(Publikation I, Interviewpartner [im Folgenden abgekürzt mit IP] 11, männlich)**

[3] Für die Publikationen I, II und III wurden die Belegzitate ins Englische übersetzt. Abweichend davon werden im Folgenden die originalen deutschsprachigen Interviews zitiert.

Mit der Anerkennung des Lebensstils als kausalem Faktor artikulieren viele Diabetes-Patienten die eigene Verantwortung bei der Krankheitsgenese. Zwar erwähnen sie, wie unten noch gezeigt werden soll, genetische, kulturelle und soziale Faktoren als wesentliche Hindernisse für die erfolgreiche Lebensstiländerung, doch führt diese Wahrnehmung nicht dazu, dass sie die Bedeutung von ungesunder Ernährung und Bewegungsmangel für die Entwicklung der Krankheit leugnen. So ist fast allen Interviewpartnern bewusst, dass ihr Lebensstil einen erheblichen Einfluss auf die Entwicklung der Krankheit hat. Ein Diabetes-Patient spricht frei über die Folgen seines langjährigen Übergewichts.

> Es ist ja auch bekannt, wie gesundheitliche Nachteile, die sich aus Übergewicht ergeben. Gibt ja nur Nachteile, gibt ja keine Vorteile. Teurere Kleidung, größere Größen und gesundheitliche Nachteile, also, gibt da keinen Vorteil. **(Publikation II, IP 38, männlich)**

Allerdings betonen einige Patienten, dass weitere Differenzierungen nötig wären und dass das Übergewicht und der daraus resultierende Diabetes Typ 2 nicht unbedingt auf einen ungesunden Lebensstil zurückzuführen sind.

> Nur, er [der Hausarzt, M. W.] darf dick nicht mit dick vergleichen. Ich bin dick nicht durchs Essen. Es gibt aber auch Dicke, die sind dick durchs Essen. **(Publikation III, IP 27, weiblich)**

Doch selbst wenn der Lebensstil für die Beschwerden verantwortlich gemacht wird, stellt er sich in den Aussagen vieler Betroffener weniger als persönliche Fehlentscheidung, sondern vielmehr als zivilisatorisches Unglück einer Gesellschaft dar, in der Genüsse im Überfluss vorhanden sind. Mit den allgegenwärtigen Verlockungen hat auch eine Interviewpartnerin zu kämpfen, die beschreibt, wie ihr Arzt immer mal wieder korrigierend in ihre alltäglichen Ernährungsgewohnheiten eingreifen muss, um sie vor den Gefahren des übermäßigen Verzehrs von Kohlenhydraten zu schützen.

> Wenn es sein muss, muss er mich mal wieder wachrütteln, und dann lebe ich besser wieder danach, und achte auf die Kohlenhydrate. Und das geht so ganz wunderbar. Wir ergänzen uns ganz gut. **(Publikation II, IP 34, weiblich)**

Für die Interviewpartnerin handelt es sich nicht um ein Wissensdefizit in Hinblick auf die Ernährung, da sich der Vorgang der Ermahnung scheinbar regelmäßig (‚mal wieder wach rütteln') wiederholt und daher eher als Appell denn als Sachinformation zu verstehen ist. Das gelegentliche ‚Wachrütteln' könnte auf dieser appellativen Ebene dazu dienen, die Motivation zu steigern, die wahrgenommenen Entbehrungen des Alltags besser zu bewältigen. Damit wird deutlich, dass die Betroffenen die Lebensstilberatung als ein wichtiges therapeutisches Element ansehen. Dennoch ergeben sich bei der Thematisierung und Beratung in der Hausarztpraxis auch Schwierigkeiten, die im Folgenden dargestellt werden sollen.

5.2 Barrieren bei der hausärztlichen Lebensstilberatung

Viele Ärzte betonten die Schwierigkeit, ihren Verdacht zur Krankheitsursache den Patienten gegenüber anzusprechen – und damit überhaupt den Einstieg in die Lebensstilberatung zu finden. Dass die Patienten in ihrer Wahrnehmung ablehnend reagieren würden, wenn etwa das Thema Gewicht zur Sprache kommt, zeigt das folgende Zitat, in dem ein Arzt in ironischer Überspitzung und fingierter Rede die von ihm antizipierte Meinung der Patienten wiedergibt.

> Und wenn der Doktor von Gewichtsreduktion redet, dann hat er, äh, ja keine Ahnung. Ja? Das Gewicht ist ja schon immer da und die Oma ist ja mit noch mehr Gewicht hundert geworden, hatte nie Schmerzen und, ähm, da gibt's die tollsten Ausreden, warum man eben selbst nicht das Gewicht reduzieren muss. **(Publikation I, IP 3, männlich)**

Wenn unterschiedliche Vorstellungen über die Ursachen der Beschwerden vorliegen, scheint für den behandelnden Arzt der Raum für wirksame, d.h. vom Patienten umgesetzte Modifikationen der Lebens- und Ernährungsgewohnheiten denkbar klein zu sein. Im Zitat erscheint er so klein, dass es für den Arzt nur wenig attraktiv ist, das Thema überhaupt anzusprechen und somit als jemand dazustehen, der ‚keine Ahnung' hat.

Das Problem bei der Empfehlung zur Gewichtsreduktion liegt aus der Patientenperspektive hingegen gar nicht so sehr darin, dass sie die Empfehlung als inhaltlich falsch

wahrnehmen, sondern dass sie ihnen zu allgemein gefasst ist, wie das folgende Zitat eines Patienten zeigt.

> [Der Arzt, M. W.] hat also richtig, äh, richtig scharf gesprochen, [...] mir ist das relativ vierspurig am Arsch vorbeigegangen. Ich kann einfach nur sagen, dass das bei allen Gesprächen in medizinischer Umgebung, in medizinischer Runde ein Standardthema ist, ein generelles Thema ist von allen Medizinern, alle drängen und drücken darauf. Und egal welche Fakultät, alle sind sich da einig, dass sie da an der Stelle das erreichen, denn was können sie groß machen, jeder ist natürlich auch ein bisschen am Erfolg interessiert und es ist ja am einfachsten, wenn man reinkommt und da sagt man erst mal, ‚nimm du erst mal 10, 15 Kilo ab, dann geht's dir auch besser.' **(Publikation II, IP 31, männlich)**

Dieses Zitat drückt eine – sicher nicht von allen Interviewpartnern geteilte, aber in ähnlicher Form auch von anderen zum Ausdruck gebrachte – generelle Skepsis gegenüber einer medizinischen Praxis aus, die lediglich standardisierte und leitliniengerechte Empfehlungen wiederholt, anstatt genauer auf die individuelle Situation des einzelnen Patienten einzugehen und dessen Möglichkeiten realistisch zu bewerten. Denn eine genaue Bestimmung der Lebensumstände kann in den Augen des Interviewpartners noch nicht stattgefunden haben, wenn Ratschläge schon dann erteilt werden, wenn der Patient in das Sprechzimmer ‚reinkommt'. Gerade wenn ihr familiäres und soziales Umfeld nicht mit einbezogen wird, schätzen viele Patienten die Alltagstauglichkeit der Ratschläge als gering ein. So beschreibt eine Mutter, die täglich für ihre Familie kocht, dass sie den (oft ungesunden) Gewohnheiten der anderen Familienmitglieder nachgibt und darauf verzichtet, mit doppeltem Aufwand ein weiteres Gericht nur für sich selbst zuzubereiten.

> Ich koche vor allem für [die Kinder, M. W.]. Das ist nicht immer unbedingt gesund. Aber zwei unterschiedliche Gerichte zu kochen, das wäre doch aufwändig. **(Publikation II, IP 60, weiblich)**

Andere Interviewpartner betonten, dass Essen auch eine symbolische Bedeutung habe, die sich mit den – von ihnen oft als Entbehrung erlebten – Lebensstiländerungen nicht vereinbaren ließe.

> Essen muss auch, ist eine Kultursache und ich bin an Kultur sehr interessiert, wenn ich das mal so scherzhaft sagen darf. Also Essen und Trinken gehört bei mir, also das ist, ja, das ist nicht nur, nur Nahrungsaufnahme, nicht. Und das sagt eigentlich schon alles. [...] also irgendwas sperrt sich da bei mir. Wenn ich da im Hinterkopf höre: ‚Ja, Du musst'. Ja, natürlich muss ich abnehmen. Ich möchte gern abnehmen. Aber was da für Voraussetzungen zu erfüllen sind, dazu bin ich in meinem Unterbewusstsein vielleicht nicht bereit. **(Publikation II, IP 41, männlich)**

Während die Hausärzte die Bedeutung des Lebensstils in ihrem Krankheitskonzept immer wieder betonten, vermuten sie, dass die Patienten kein Interesse an der Suche nach den Ursachen ihrer Erkrankung haben. Unzureichende Kenntnisse über deren Ätiologie führten aber zu einer Erwartungshaltung, die weder dem Charakter der Beschwerden noch den zur Verfügung stehenden Möglichkeiten zu ihrer Milderung gerecht werden könnten.

> Die wollen alle, mit solchen Krankheiten erwarten Patienten immer eine Wunderheilung. Dass die zum Arzt gehen, krank reingehen, gesund wieder rausgehen. So wie man das Auto auch krank in die Werkstatt bringt und eben in Ordnung wieder rausholt. **(Publikation I, IP 12, männlich)**

Die Erwartung einer solchen ‚Wunderheilung' ist nicht nur nicht zu erfüllen, sie stellt geradezu eine potentielle Gefahr für die Arzt-Patient-Beziehung dar. Denn durch den Vergleich mit der Autoreparatur bringt der Hausarzt zum Ausdruck, dass er und zumindest einige seiner Patienten sehr unterschiedliche Vorstellungen von dem haben, was die (Haus-)Ärzte leisten sollen. Das Bild eines zu reparierenden Autos signalisiert, dass die Patienten seiner Meinung nach falsche Auffassungen von der Pathophysiologie der Beschwerden haben und sich nicht über die Notwendigkeit einer starken Eigenbeteiligung an der Therapie im Klaren sind. Anders als bei einer Autoreparatur ist aus Sicht vieler interviewter Hausärzte das Engagement der Patienten erforderlich – und in Form eines aktiven Lebensstils auch der vielversprechendste Ansatz für eine dauerhafte Linderung der Beschwerden.

Im Gegensatz dazu legen viele Diabetes-Patienten sehr viel Wert darauf, sich in den Interviews (und vermutlich auch in der Gesprächssituation mit ihrem Hausarzt) als standhaft und diszipliniert zu präsentieren. Allerdings erfordert diese Standhaftigkeit

viel Kraft. Im folgenden Zitat kritisiert eine Betroffene, dass die behandelnden Ärzte diese Anstrengung gar nicht richtig honorieren.

> Also, ich bin standhaft, das sage ich auch jedes Mal den Ärzten und den anderen, und so mal. ‚Ihr wisst gar nicht, wie schwierig das ist, manchmal für mich, da zu stehen und darauf zu verzichten.' Das ist gar nicht mal so einfach. Also es ist jedes Mal ein Kampf aufs Neue und nicht einfach. **(Publikation III, IP 60, weiblich)**

In der fehlenden Anerkennung für diesen ‚Kampf' um eine enthaltsame Ernährung lauert ein erhebliches Konfliktpotential, handelt es sich doch nicht nur um ein gesundheitliches, sondern auch um ein moralisches Problem. Wenn Hausärzte nicht wahrnehmen, wie schwer manchen Patienten der Verzicht fällt, fehlt es auch an dessen Wertschätzung. Dass manche Interviewpartner sogar das Gefühl einer moralischen Verurteilung haben, die weit in den Alltag hineinreicht und damit die gesamte Person betrifft, zeigt sich in der folgenden Anekdote.

> Wir [der Patient und der Hausarzt, M. W.] kaufen gemeinsam bei einem Getränkehändler ein und er war in der glücklichen Situation, er kam grade um die Ecke rum mit einer Kiste Wasser und ich hatte zufällig eine Kiste Bier in der Hand; und da hat er ohne, dass wir uns darüber verständigen mussten, mir deutlich zu erklären gegeben, es wäre hier wohl besser, wenn ich auch Wasser genommen hätte. Dabei hab ich ihm dann beim nächsten Besuch in der Praxis gesagt, ‚das Bier war gar nicht für mich, Sie wissen doch, dass ich Weintrinker bin, hab ich für meine Jungs gekauft'. **(Publikation III, IP 33, männlich)**

Die moralische Konnotation der ärztlichen Zurechtweisung wird vor allem durch die Rechtfertigung des Patienten deutlich, der das Bedürfnis hat, beim nächsten Arztbesuch seinem Hausarzt zu erklären, dass er das Bier gar nicht für sich selbst gekauft habe. Auch viele andere Interviewpartner antizipieren einen möglichen Vorwurf des Hausarztes (und auch des Interviewers) und legen viel Wert darauf, in den Interviews ihre Disziplin hervorzuheben.

5.3 Potentiale der hausärztlichen Lebensstilberatung

Die Spannungen, die sich aus den unterschiedlichen Vorstellungen von einer effektiven Therapie ergeben, sind beiden Interviewgruppen durchaus bewusst. Die meisten

Hausärzte betonen, dass es für die Aufrechthaltung der Arzt-Patient-Beziehung wichtig sei, solche Konflikte zu vermeiden. Dafür kann es auch nötig sein, die Vorstellungen des Patienten zunächst einmal hinzunehmen und auf seine Wünsche einzugehen.

> Man muss von seinem eigenen Standard ablassen, von seinem eigenen Krankheitsbild und seiner eigenen Einstellung zu seinem Körper, eben akzeptieren, dass der Patient krank ist und vorgibt, was er gerne möchte. **(Publikation I, IP 3, männlich)**

Die Strategie, vom ‚eigenen Standard ab[zu]lassen' klingt zunächst nach Resignation. Und in der Tat erfüllen Ärzte wohl gar nicht selten den Patientenwunsch, z.B. in Form von passiven Anwendungen wie Massagen, Wärmetherapie durch Infrarotlicht oder Krankschreibungen. Die explizierte Notwendigkeit (‚man muss') deutet zudem an, dass der interviewte Hausarzt davon ausgeht, dass nur die Strategie des Nachgebens Erfolg verspricht. Mit dem folgenden Zitat vom gleichen Hausarzt wird aber deutlich, dass die veränderten ‚Standards' keineswegs bedeuten müssen, das Ziel der Aktivierung ganz aufzugeben.

> Dann [wenn man von seinem eigenen Standard ablässt, M. W.] kommen manchmal Patienten wieder zu mir im Rahmen einer solchen Konsultation, manchmal bei einem ganz anderen Grund und sagen: Mensch, sie hatten doch vor einem halben Jahr von diesem Reha-Sport geredet. Und dann kommen sie manchmal wieder von sich aus auf mich zu. **(Publikation I, IP 3, männlich)**

Die Themen Bewegung und Sport sind also für den Interviewpartner trotz anfänglichen Nachgebens noch nicht verloren, sondern können auch nach ‚einem halben Jahr' erneut aufgegriffen werden – mit Hoffnung auf größere Akzeptanz. Auch zahlreiche andere Interviewpartner heben hervor, dass ihre Rolle es erlaubt, den Patienten über einen längeren Zeitraum zu begleiten und dadurch auf ihn Einfluss zu nehmen. Vor einem solchen Hintergrund erscheint dann auch die angenommene Notwendigkeit ‚von seinem eigenen Standard ab[zu]lassen' weniger als Kapitulation, sondern als eine Strategie des Beziehungsaufbaus. Die Langfristigkeit der Beziehung lässt eine kurzfristige Erfüllung der Patientenwünsche nach nicht immer evidenzbasierten Maßnahmen durchaus zu, ohne dabei das Ziel der Lebensstilmodifikation aus den Augen zu verlieren. Damit wird auch deutlich, dass einige Hausärzte die Lebensstilberatung als ein sensibles Thema wahrnehmen, das vor allem in einer langfristigen Arzt-Patient-

Beziehung angegangen werden kann. Wichtig ist in diesem Kontext auch die Wortwahl des Hausarztes. Diese muss aber nicht immer unbedingt behutsam sein. Ganz im Sinne der oben zitierten ‚Wachrüttel'-Funktion wünschen zahlreiche Patienten, dass ihr Arzt gelegentlich mit deutlichen Worten das Thema der Gewichtsreduktion anspricht.

> Der [Arzt, M. W.] würde mir auch auf den Kopf drauf zu sagen, ‚so geht es nicht, mein Freund', und das finde ich ja toll, denn ich meine, wenn ich zu einem Arzt Vertrauen habe, dann bin ich frei, ich spreche auch über jede Sache, die ich habe, meine Probleme, was ja sonst nicht passieren würde. Und ich fasse es ganz anders auf, wenn der mir was sagt, der meint es schon gut mit mir. **(Publikation II, IP 36, männlich)**

Vertrauen ist für den Patienten ganz entscheidend, um empfänglich für Ratschläge zu sein. Dieses Vertrauen gründet sich auch auf der Wahrnehmung, dass der Arzt es gut mit ihm meint und mit seinen Ratschlägen tatsächlich helfen möchte. Lebensstilberatung wird hier als kontinuierlicher und immer wieder neu zu verhandelnder Teil der Arzt-Patient-Beziehung erlebt.

6 Diskussion

6.1 Zusammenfassung der Ergebnisse

Bei unspezifischen Nackenschmerzen und Diabetes Typ 2 sind der Lebensstil und seine Thematisierung in der Hausarztpraxis für Ärzte und Patienten von zentraler Bedeutung. Beide Seiten betonen die Komplexität und nicht selten auch das Konfliktpotential, das mit diesem Thema einhergeht. Den Vorwurf, durch einen ungesunden Lebensstil und mangelnde Selbstkontrolle selbst für die Krankheit und ihren Verlauf verantwortlich zu sein, hören Diabetes-Patienten oft in der hausärztlichen Praxis – oder glauben ihn zu hören. Wie emotional belastend und kontextsensibel das Thema Lebensstiländerung aufgenommen wird, ist aus den Interviews deutlich herauszulesen, wenn sich die Patienten einerseits als maßvoll und diszipliniert darstellen, andererseits aber auch die kulturelle und soziale Dimension von Essen und Ernährung betonen. Ärzte hingegen sind frustriert, wenn sie den Eindruck gewinnen, dass die Patienten sich für Vorschläge zur Lebensstiländerung wenig empfänglich zeigen und übersteigerte Erwartungen an den Behandlungsverlauf haben. Auch wenn es scheint, dass sich hier zwei Seiten unversöhnlich gegenüberstehen, bietet die Langfristigkeit der Arzt-Patient-Beziehung die kommunikative Basis, auf der das komplexe Thema Lebensstil überhaupt erst konstruktiv thematisiert werden kann.

6.2 Einbettung in den Forschungsstand

Dass die Lebensstilberatung in der Hausarztpraxis konfliktbeladen sein kann, zeigen auch andere Untersuchungen. So äußern Patienten einer norwegischen Studie den Wunsch, dass sich ihr Hausarzt mehr Zeit für die Beratung nimmt und sie auch emotional in ihren Bemühungen bekräftigt (Walseth et al. 2011). In einer schwedischen Studie beschreiben viele Diabetes-Patienten, vor allem Frauen, dass sie vom Hausarzt beschuldigt und gelegentlich sogar bloßgestellt werden, wenn es um ihr Gewicht geht (Svenningsson et al. 2011). Mit Blick auf die hier vorliegenden Ergebnisse muss dieser Befund allerdings dahingehend relativiert werden, dass einige Patienten die offene Ansprache mit teilweise direkten Worten im Sinne der oben dargestellten

‚Wachrüttel'-Funktion durchaus schätzen – natürlich nur unter der Voraussetzung einer Arzt-Patient-Beziehung, in der sich die Patienten ernst genommen und emotional gestützt fühlen.

Die Anerkennung der eigenen Bemühungen um eine Lebensstiländerung war ein weiterer Wunsch der Patienten. Der zeitliche Umfang der Beratung spielte dagegen in den Interviews nur eine untergeordnete Rolle. Viel wichtiger war es für die Patienten, möglichst konkrete und alltagstaugliche Hilfestellungen zu erhalten.

Auch für Ärzte ist die Lebensstilberatung eine Herausforderung. So fühlten sich in einer französischen Studie über die Hälfte der befragten Hausärzte der Lebensstilberatung bei übergewichtigen Patienten fachlich nicht gewachsen (Thuan und Avignon 2005). In einer deutschen Studie empfanden Hausärzte die Lebensstilberatung aufgrund der wahrgenommenen geringen Motivation der Patienten als frustrierend (Sonntag et al. 2012). Dieser Umstand wird auch in den Aussagen einiger ärztlicher Interviewpartner der vorliegenden Studie deutlich, die von passiven und in ihren Augen nicht selten überzogenen Erwartungshaltungen der Patienten berichten. Allerdings haben einige Hausärzte eine Strategie entwickelt, langfristig mit den Patienten ins Gespräch zu kommen, um dann später Veränderungsprozesse initiieren zu können. Dafür sind sie sogar bereit, auch die medizinisch scheinbar nicht sinnvollen Wünsche der Patienten zunächst zu erfüllen. So wird das Thema der körperlichen Aktivität aus der Akutsituation der aktuellen (Schmerz-)Behandlung herausgenommen und in die langfristige Arzt-Patient-Beziehung integriert. Die direkte Intervention zur Schmerzlinderung, z.B. durch lokale Infiltrationen, kann daher als eine Form der Beziehungsgestaltung begriffen werden, welche die Beschwerden des Patienten anerkennt und um einen Vertrauensaufbau bemüht ist. Natürlich ist dabei der Grundsatz, dem Patienten nicht zu schaden, streng einzuhalten. Ebenso sind ökonomische Aspekte in Betracht zu ziehen, die mit diesen Therapieformen verbunden sind.

Im Setting der Hausarztpraxis weisen standardisierte Interventionen zur Lebensstilmodifikation oft nur eine geringe Wirksamkeit auf, wie ein kanadisches Review zeigt (Fleming und Godwin 2008). Die Ergebnisse dieser Arbeit deuten für den ausbleibenden Erfolg mehrere Gründe an, die bislang in der Forschung nur wenig Beachtung fanden. So erscheint die Rolle der Arzt-Patient-Beziehung für den Erfolg von

Lebensstilinterventionen als ein Forschungsdesiderat. Dies ist umso erstaunlicher, als der Gesundheitseffekt einer guten Beziehung zwischen Arzt und Patient nicht erst seit Michael Balint bekannt ist und auch empirisch untersucht wurde (Di Blasi et al. 2001). In der vorliegenden Untersuchung zeigt sich die Beziehungsqualität als Schlüssel zur erfolgreichen Lebensstilberatung. Zudem ist die Berücksichtigung des individuellen Lebenskontextes für die Patienten von großer Bedeutung. Dies lässt sich in standardisierten Beratungsangeboten nur schwer berücksichtigen. Bisher wurden vor allem Letztere auf ihre Wirksamkeit hin untersucht. Die fehlende Berücksichtigung der Kontextabhängigkeit und der sozialen Einbettung der Patienten könnte dabei für den ausbleibenden Erfolg bisheriger Maßnahmen mitverantwortlich sein.

Vor diesem Hintergrund stellt sich die Frage, wie eine kontextsensible und empathische Lebensstilberatung gelingen kann. Einige Strategien, die in den Interviews als erfolgversprechend erscheinen, weisen Ähnlichkeit zum therapeutischen Ansatz der Motivierenden Gesprächsführung auf (aus dem Englischen ‚Motivational Interviewing'). Vereinfacht gesagt, zielt die Motivierende Gesprächsführung auf eine Änderung der intrinsischen Motivation des Patienten ab, die dann in der Konsequenz in einer Änderung des Verhaltens münden soll (Rollnick et al. 2008; Alperstein und Sharpe 2016; Ekong und Kavookjian 2016). Dabei sollen durch empathisches Zuhören und Nachfragen die Diskrepanzen zwischen dem gegenwärtigen Verhalten des Patienten auf der einen und seinen langfristigen Vorstellungen und Zielen auf der anderen Seite transparent gemacht werden (Emmons und Rollnick 2001). Die zentrale Annahme dieses Ansatzes ist es, dass die Patienten nun ihr Verhalten aus eigener Motivation heraus ändern, um die ihnen bewusst gewordenen Dissonanzen zu reduzieren. Die Technik der Motivierenden Gesprächsführung ist auch deshalb interessant für die Themen Ernährung und Bewegung, weil ein wichtiges Ziel darin besteht, ambivalente Einstellungen zu erkunden. Bei den Patienten mit Diabetes Typ 2 werden solche Ambivalenzen deutlich, wenn sie sich betont als diszipliniert darstellen, aber auch auf gelegentliche (ungesunde) Genüsse bestehen.

Motivierende Gesprächsführung hat sich bei verschiedenen Präventionsvorhaben, wie z.B. der Raucherentwöhnung, als wirksamer als die konventionelle Beratung herausgestellt. Auch in der Diabetes-Behandlung hat der Ansatz vielversprechende Ergebnisse hervorgebracht (Ekong und Kavookjian 2016). In der vorliegenden Studie kommen

Elemente dieses Ansatzes unter anderem zum Ausdruck, wenn ein Hausarzt davon berichtet, dass die Änderung der Motivation der Patienten zwar durchaus mehr Zeit in Anspruch nehmen kann, dann aber zu Ergebnissen führt, die für beide Parteien befriedigend sind. Dabei kann es für die interviewten Ärzte sogar legitim sein, auf Maßnahmen zurückzugreifen, deren Evidenz nicht gesichert ist.

6.3 Limitationen der Studien

Die vorliegende Arbeit greift mit der Lebensstilberatung ein übergeordnetes Thema aus drei eigenständigen Untersuchungen auf. Zu berücksichtigen ist vor allem, dass zum Krankheitsbild der unspezifischen Nackenschmerzen nur Hausärzte, zu Diabetes Typ 2 nur Patienten befragt wurden. Aufgrund verschiedener Projekthintergründe unterscheiden sich die Studien auch hinsichtlich der Erhebungs- und Auswertungsverfahren: Während sich die Hausarzt-Interviews an einem Leitfaden orientierten, wurden die Patienten-Interviews offen gestaltet. Es lässt sich daher nicht sagen, ob die Lebensstilberatung für beide Beschwerden ein ähnliches Gewicht besitzt und in der Behandlung jeweils eine ähnliche Rolle spielt. Trotz dieser methodischen Unterschiede legen der Umfang der Äußerungen und ihre emotionale Besetzung für beide Interviewgruppen nahe, dass der Lebensstil für beide von immenser Bedeutung ist.

In den drei dieser Arbeit zugrundeliegenden Publikationen kamen qualitative Erhebungs- und Auswertungsmethoden zum Einsatz. Qualitative Methoden sind besonders gut geeignet, um subjektive Vorstellungen von Betroffenen, wie z.B. Ärzten und Patienten, einzufangen. Auf der anderen Seite ist die Möglichkeit der Beeinflussung der Ergebnisse ungleich höher als bei quantitativen Untersuchungen, da der Untersucher in allen Phasen des Forschungsprozesses Einfluss auf die Entwicklung der Ergebnisse nehmen kann. So kann er entscheiden, welche Fragen im Interview gestellt werden, auf welche Weise dies geschieht, welche Bedeutung er den Antworten zuschreibt und welche Schwerpunkte er bei der inhaltlichen Auswertung legt. Mit wiederholten Treffen der jeweiligen Forschungsgruppe haben wir versucht, diese Probleme zu minimieren, um eine intersubjektive Nachprüfbarkeit und Plausibilität zu generieren. Die Ergebnisse der qualitativen Forschung streben nicht an, etwa für eine bestimmte Bevölkerungsgruppe repräsentativ zu sein. Vielmehr war das Ziel der

vorliegenden Publikationen, Erfahrungen und subjektive Sinnzuschreibungen möglichst detailliert abzubilden.

Natürlich sind auch die einzelnen Studien nicht frei von Limitationen. Die Untersuchung zu unspezifischen Nackenschmerzen stützt sich ausschließlich auf Interviews mit Hausärzten aus der Region Südniedersachen und schränkt damit die Aussagekraft für den gesamtdeutschen Raum ein. Dieses Problem umgeht die Studie zu den Erfahrungen der Diabetes-Patienten mit einer bundesweiten Datenerhebung. Allerdings basierte die Rekrutierung der Patienten auf Mithilfe der betreuenden Hausärzte, so dass ein Selektionsbias nicht ausgeschlossen werden kann. Da aber die Interviewpartner ihren Hausarzt keineswegs immer nur positiv einschätzen, scheint diese Gefahr vor allem theoretischer Natur zu sein.

6.4 Fazit und Ausblick

Die hier vorgestellten Studien lassen vermuten, dass eine Lebensstilberatung, die auf einer vertrauensvollen Arzt-Patient-Beziehung basiert und die moralische Bedeutung sowie die Lebenssituation der Patienten anerkennt, erfolgreicher ist als standardisierte Ernährungs- bzw. Bewegungsprogramme. In weiteren Untersuchungen wäre zu klären, wie sich diese individuell zugeschnittenen Formen der Lebensstilberatung in der Praxis etablieren und dann evaluieren lassen. Die Bedeutung des Lebensstils für verschiedene, in ihrer Prävalenz zunehmende Krankheiten, wie Stoffwechselerkrankungen, koronare Herzerkrankungen und muskuloskelettale Beschwerden, sollte dabei auch im Medizinstudium stärker berücksichtigt werden. Hierbei wäre insbesondere zu vermitteln, dass Lebensstilberatung zwar eine wichtige, aber auch eine komplexe Aufgabe im Rahmen der medizinischen Tätigkeit darstellt, die den Patienten mit allen damit verbundenen Gefahren der moralischen Bewertung wahrnimmt. Für die konkrete (haus-)ärztliche Behandlung steht mit der Motivierenden Gesprächsführung ein Ansatz zur Verfügung, der auf diese Schwierigkeiten und die oft ambivalenten Einstellungen des Patienten eingeht und somit weitere Verbreitung in Lehre und Routineversorgung finden sollte. In weiterer Forschung wäre zu klären, wie dieser Ansatz als alltagspraktisches Element der Versorgung am besten zum Einsatz gebracht werden könnte.

7 Literaturverzeichnis

Allin S, Mossialos E, McKee M, Holland WW: Making decisions on public health: A review of eight countries. WHO Regional Office for Europe, Kopenhagen 2004

Alperstein D, Sharpe L (2016): The Efficacy of Motivational Interviewing in Adults With Chronic Pain: A Meta-Analysis and Systematic Review. J Pain 17(4), 393-403

Ball L, Hughes R, Desbrow B, Leveritt M (2012): Patients' perceptions of nutrition care provided by general practitioners: focus on Type 2 diabetes. Fam Pract 29(6), 719-725

Boren SA, Fitzner KA, Panhalkar PS, Specker JE (2009): Costs and benefits associated with diabetes education: a review of the literature. Diabetes Educ 35(1), 72-96

Bot SD, van der Waal JM, Terwee CB, van der Windt DA, Scholten RJ, Bouter LM, Dekker J (2005): Predictors of outcome in neck and shoulder symptoms: a cohort study in general practice. Spine 30(16), E459

Bovim G, Schrader H, Sand T (1994): Neck pain in the general population. Spine 19(12), 1307-1309

Bundesärztekammer, Kassenärztliche Bundesvereinigung, Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften: Nationale Versorgungs-Leitlinie zur Therapie des Typ 2 Diabetes. 1. Auflage 2014. Online verfügbar unter: http://www.deutsche-diabetes-gesellschaft.de/fileadmin/Redakteur/Leitlinien/Evidenzbasierte_Leitlinien/NVL_Therapie_DM2_lang_Aug_13_geae_Nov_2014.pdf, abgerufen am: 29.12.2016

Clement S (1995): Diabetes self-management education. Diabetes Care 18(8), 1204-1214

Deutsche Gesellschaft für Allgemeinmedizin und Familienmedizin: Nackenschmerzen. Omikron Publishing, Düsseldorf 2009. Online verfügbar unter: http://www.awmf.org/uploads/tx_szleitlinien/053-007l_S3_Nackenschmerzen_2009_abgelaufen.pdf, abgerufen am: 29.12.2016

Di Blasi Z, Harkness E, Ernst E, Georgiou A, Kleijnen J (2001): Influence of context effects on health outcomes: a systematic review. Lancet 357(9258), 757-762

Eakin EG, Glasgow RE, Riley KM (2000): Review of primary care-based physical activity intervention studies: effectiveness and implications for practice and future research. J Fam Pract 49(2), 158-168

Easthope G, Hansen EC: Lifestyle, health and disease. Routledge, London 2007

Ekong G, Kavookjian J (2016): Motivational Interviewing and outcomes in adults with type 2 diabetes: A systematic review. Patient Educ Couns 99(6), 944-952

Emmons KM, Rollnick S (2001): Motivational Interviewing in health care settings. Opportunities and limitations. Am J Prev Med 20(1), 68-74

Fleming P, Godwin M (2008): Lifestyle interventions in primary care: systematic review of randomized controlled trials. Can Fam Physician 54(12), 1706-1713

Heller CA, Stanley P, Lewis-Jones B, Heller RF (1983): Value of x ray examinations of the cervical spine. Br Med J (Clin Res Ed) 287(6401), 1276-1278

Hogg-Johnson S, van der Velde G, Carroll LJ, Holm LW, Cassidy JD, Guzman J, Cote P, Haldeman S, Ammendolia C, Carragee E et al. (2009): The burden and determinants of neck pain in the general population: results of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. J Manipulative Physiol Ther 32(2 Suppl), S46-60

Kreuter MW, Strecher VJ, Glassman B (1999): One size does not fit all: the case for tailoring print materials. Ann Behav Med 21(4), 276-283

Lawlor DA, Keen S, Neal RD (2000): Can general practitioners influence the nation's health through a population approach to provision of lifestyle advice? Br J Gen Pract 50(455), 455-459

Laws RA, Jayasinghe UW, Harris MF, Williams AM, Powell Davies G, Kemp LA (2009): Explaining the variation in the management of lifestyle risk factors in primary health care: a multilevel cross sectional study. BMC Public Health 9, 165

Leitlinie Diabetes Typ 2 s. Bundesärztekammer, Kassenärztliche Bundesvereinigung, Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften: Nationale Versorgungs-Leitlinie zur Therapie des Typ 2 Diabetes.

Leitlinie Nackenschmerzen s. Deutsche Gesellschaft für Allgemeinmedizin und Familienmedizin: Nackenschmerzen.

Lucius-Hoene G, Groth S, Becker AK, Dvorak F, Breuning M, Himmel W (2013): Wie erleben Patienten die Veröffentlichung ihrer Krankheitserfahrungen im Internet? Rehabilitation (Stuttg) 52(3), 196-201

Marx J (2002): Unraveling the causes of diabetes. Science 296(5568), 686-689

Moore H, Summerbell C, Hooper L, Cruickshank K, Vyas A, Johnstone P, Ashton V, Kopelman P (2004): Dietary advice for treatment of type 2 diabetes mellitus in adults. Cochrane Database Syst Rev(3), CD004097

Mulcahy K, Maryniuk M, Peeples M, Peyrot M, Tomky D, Weaver T, Yarborough P (2003): Diabetes self-management education core outcomes measures. Diabetes Educ 29(5), 768-770

Norris SL, Nichols PJ, Caspersen CJ, Glasgow RE, Engelgau MM, Jack L, Isham G, Snyder, SR, Carande-Kulis VG, Garfield S et al. (2002): The effectiveness of disease and case management for people with diabetes. A systematic review. Am J Prev Med 22(4 Suppl), 15-38

Rippe JM: Lifestyle medicine. 2nd edition. CRC Press, Boca Raton u. a. 2013

Rollnick S, Miller WR, Butler C: Motivational interviewing in health care: Helping patients change behavior (Applications of motivational interviewing). Guilford Press, New York 2008

Sonntag U, Brink A, Renneberg B, Braun V, Heintze C (2012): GPs' attitudes, objectives and barriers in counselling for obesity-a qualitative study. Eur J Gen Pract 18(1), 9-14

Strauss AL, Corbin JM: Grounded theory: Grundlagen qualitativer Sozialforschung. Beltz, Weinheim 1996

Svenningsson I, Gedda B, Marklund B (2011): Experiences of the encounter with the diabetes team-a comparison between obese and normal-weight type 2 diabetic patients. Patient Educ Couns 82(1), 58-62

Thuan J-F, Avignon A (2005): Obesity management: attitudes and practices of French general practitioners in a region of France. Int J Obes (Lond) 29(9), 1100-1106

Walseth LT, Abildsnes E, Schei E (2011): Patients' experiences with lifestyle counselling in general practice: a qualitative study. Scand J Prim Health Care 29(2), 99-103

Wanyonyi KL, Themessl-Huber M, Humphris G, Freeman R (2011): A systematic review and meta-analysis of face-to-face communication of tailored health messages: implications for practice. Patient Educ Couns 85(3), 348-355

Whitlock EP, Orleans CT, Pender N, Allan J (2002): Evaluating primary care behavioral counseling interventions: an evidence-based approach. Am J Prev Med 22(4), 267-284

Yeh BI, Kong ID (2013): The Advent of Lifestyle Medicine. J Lifestyle Med 3(1), 1-8

Zronek M, Sanker H, Newcomb J, Donaldson M (2016): The influence of home exercise programs for patients with non-specific or specific neck pain: a systematic review of the literature. J Man Manip Ther 24(2), 62-73

8 Primärpublikationen

8.1 Publikation I

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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 predefined 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.[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.[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.[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.[4] However, the effectiveness of these and related treatment options has not yet been proven.[5]

By definition, the cause of non-specific neck pain is largely unknown.[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.[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.[9] Instead of exploring the aetiology, they frequently prefer a predefined 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.[10] 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.[9,10] 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,[11] 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.

TABLE 1 *Participant characteristics*

Participant number	Interview length (minutes:seconds)	Age (years)	Sex	Additional qualification
1	37:06	48	M	
2	19:58	40	F	Psychotherapy
3	41:22	37	M	
4	39:10	63	M	
5	15:59	38	F	Acupuncture
6	32:23	46	M	
7	48:27	55	F	
8	36:27	44	M	
9	28:43	52	M	
10	35:50	47	M	Nutritional consultant
11	27:12	64	M	Chiropractitioner
12	34:12	53	M	Acupuncture
13	30:07	48	F	Psychotherapy
14	39:55	57	F	Psychotherapy
15	35:12	60	F	
16	67:26	59	F	Pain therapy
17	30:20	45	M	
18	32:45	51	F	Psychotherapy
19	26:13	41	F	
Mean	34:40	49.9	10:9 (M:F)	

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 unanticipated 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.[11] 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

Box 1 *Key topics in the first interview guide*

- Aetiology of neck pain
- Usual management strategies
- Evidence of treatment options
- Cooperation with specialists, especially surgeons
- General views on guidelines and treatment recommendations

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,[12] there is extensive evidence on GPs' attitudes and management strategies in chronic low back pain and medically unexplained symptomes.[13–18] 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,[19,20] 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.[21]

The GPs' perception that patients frequently asked for somatic treatment can be confirmed by our qualitative interview study with patients suffering from neck pain.[9] 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.*[17] 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 often favoured by GPs, whereas the patients request emotional support and explanations.[17,22] 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.[23] 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[24] 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.[4] 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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Declaration

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References

[1] Cote P, Cassidy JD, Carroll L. The Saskatchewan Health and Back Pain Survey. The prevalence of neck pain and related disability in Saskatchewan adults. *Spine* 1998; **23:** 1689–98.
[2] Vos C, Verhagen A, Passchier J, Koes B. Management of acute neck pain in general practice: a prospective study. *Br J Gen Pract* 2007; **57:** 23–8.
[3] Feleus A, Bierma-Zeinstra SM, Bernsen RM *et al*. Management decisions in nontraumatic complaints of arm, neck, and shoulder in general practice. *Ann Fam Med* 2009; **7:** 446–54.
[4] Guzman J, Haldeman S, Carroll LJ *et al*. Clinical practice implications of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders: from concepts and findings to recommendations. *J Manipulative Physiol Ther* 2009; **32:** 227–43.
[5] Carroll LJ, Hogg-Johnson S, van der Velde G *et al*. Course and prognostic factors for neck pain in the general population: results of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. *Spine* 2008; **33:** 75–82.
[6] Jones RP. *Oxford Textbook of Primary Medical Care.* Oxford: Oxford University Press, 2004.
[7] Blozik E, Laptinskaya D, Herrmann-Lingen C *et al*. Depression and anxiety as major determinants of neck pain: a cross-sectional study in general practice. *BMC Musculoskelet Disord* 2009; **10:** 13.
[8] Siivola SM, Levoska S, Latvala K *et al*. Predictive factors for neck and shoulder pain: a longitudinal study in young adults. *Spine* 2004; **29:** 1662–9.
[9] Scherer M, Schaefer H, Blozik E, Chenot JF, Himmel W. The experience and management of neck pain in general practice: the patients' perspective. *Eur Spine J* 2010; **19:** 963–71.
[10] Scherer M, Blozik E, Himmel W *et al*. Psychometric properties of a German version of the neck pain and disability scale. *Eur Spine J* 2008; **17:** 922–9.
[11] Strauss AL, Corbin JM. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques.* Newbury Park, CA: Sage, 1990.
[12] Russell G, Nicol P. 'I've broken my neck or something!' The general practice experience of whiplash. *Fam Pract* 2009; **26:** 115–20.
[13] Chew-Graham CA, May C. Chronic low back pain in general practice: the challenge of the consultation. *Fam Pract* 1999; **16:** 46–9.
[14] Breen A, Austin H, Campion-Smith C, Carr E, Mann E. "You feel so hopeless": a qualitative study of GP management of acute back pain. *Eur J Pain* 2007; **11:** 21–9.
[15] Wileman L, May C, Chew-Graham CA. Medically unexplained symptoms and the problem of power in the primary care consultation: a qualitative study. *Fam Pract* 2002; **19:** 178–82.
[16] Woivalin T, Krantz G, Mantyranta T, Ringsberg KC. Medically unexplained symptoms: perceptions of physicians in primary health care. *Fam Pract* 2004; **21:** 199–203.
[17] Ring A, Dowrick CF, Humphris GM, Davies J, Salmon P. The somatising effect of clinical consultation: what patients and doctors say and do not say when patients present medically unexplained physical symptoms. *Soc Sci Med* 2005; **61:** 1505–15.
[18] Epstein RM, Shields CG, Meldrum SC *et al*. Physicians' responses to patients' medically unexplained symptoms. *Psychosom Med* 2006; **68:** 269–76.
[19] Chew-Graham CA, May C. 'Partners in pain'—the game of pain-manship revisited. *Fam Pract* 2000; **17:** 285–7.
[20] Chew-Graham CA, May CR, Roland MO. The harmful consequences of elevating the doctor-patient relationship to be a primary goal of the general practice consultation. *Fam Pract* 2004; **21:** 229–31.
[21] Hall JA, Milburn MA, Roter DL, Daltroy LH. Why are sicker patients less satisfied with their medical care? Tests of two explanatory models. *Health Psychol* 1998; **17:** 70–5.
[22] Salmon P, Ring A, Dowrick CF, Humphris GM. What do general practice patients want when they present medically unexplained symptoms, and why do their doctors feel pressurized? *J Psychosom Res* 2005; **59:** 255–60.
[23] Corbett M, Foster N, Ong BN. GP attitudes and self-reported behaviour in primary care consultations for low back pain. *Fam Pract* 2009; **26:** 359–64.
[24] Clemence ML, Seamark DA. GP referral for physiotherapy to musculoskeletal conditions—a qualitative study. *Fam Pract* 2003; **20:** 578–82.

8.2 Publikation II

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Type 2 diabetes patients' perspectives on lifestyle counselling and weight management in general practice: a qualitative study

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Abstract

Background: Lifestyle counselling is a pivotal aspect of diabetes care. But general practitioners (GPs) often have problems in finding their role in patients' weight management. The aims of this study were to investigate the experiences of type 2 diabetes patients with lifestyle counselling from their GPs and to explore how patients' preferences regarding counselling are embedded in the context of self-management and wider cultural aspects of nutrition.

Methods: Narrative interviews were conducted with 35 people with type 2 diabetes aged between 35 and 77 years. The interviews were transcribed verbatim and analysed using the thematic framework method.

Results: Many patients had a strong feeling of personal responsibility for weight reduction as integral to diabetes self-management but found it difficult to integrate the changes their disease requires into their self-management activities. They attached great importance to their GPs' advice on diet. While some patients appreciated direct communication, others regarded dramatic pictures as either unhelpful or offending. A serious problem was the incompatibility of the dietary recommendations with daily life resulting in a reluctance to adjust the whole diet to the needs of diabetes care.

Conclusions: Ambivalence towards patient self-management and tensions between the necessary changes to patients' lifestyles and their culture, makes the GP's role difficult and full of conflict. Instead of focusing exclusively on the guidelines of diabetes management and provision of information, GPs should explore the patients' capabilities of self-management through open communication and accept their patients' wishes to protect nutrition as part of their culture.

Keywords: Type 2 diabetes, Physician-patient relations, Obesity, Eating, Patient education, Family practice, Qualitative research

Background

Type 2 diabetes impacts lifestyle habits such as eating, smoking and physical activity much more than other medical conditions and it requires regular glycaemic monitoring [1]. Excessive eating as well as an inactive lifestyle are, in addition to genetic factors, considered the major causes for type 2 diabetes [2]. Consequently, lifestyle interventions are endorsed as one of the most promising therapeutic options [1,3] and evidence suggests that type 2 diabetes patients would like to receive nutritional advice [4].

Given the possibility of regular contact and the often close relationships patients have with their general practitioner (GP), GPs play a pivotal role in lifestyle counselling and self-management education [5]. While lifestyle counselling in primary care is generally considered to be effective [6], GPs reported having difficulty in finding their role in patients' weight management [7-9]. At the same time, patients have also reported experiencing a paternalistic attitude [10] or to have been accused of cheating by professionals [11]. Obese diabetic patients, especially women, feel their physicians provoke feelings of being stuck, defiance, guilt or shame [12].

One reason for these difficulties and tensions between patients and physicians may be that communication

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about eating, weight loss and exercise is not so much a technical problem, but instead infringes on individual autonomy and self-identity [13] as well as cultural and personal aspects of what constitutes healthy food and social eating practices. Therefore, it seems likely that individual preferences and social or cultural values not only shape a patient's behaviour but also influence their experience of lifestyle counselling, especially dietary advice. The aim of this study was to explore the type 2 diabetes patients' perception of diet counselling by GPs. Moreover, by adopting a narrative approach towards data collection we wanted to give patients the opportunity to provide rich accounts of their experiences and to embed their perceptions in the wider context of diabetes self-management and cultural aspects of nutrition.

Methods

Context and setting

A qualitative design was employed to study patients' experiences and preferences in detail. The study made use of a large database of patient experiences which provided the basis of the website www.krankheitserfahrungen.de. This website is based on the idea and methods of the British website www.healthtalkonline.org. It contains interview sequences as video, audio or text about experiences of people suffering from chronic conditions. Both the German and British projects are part of DIPEx International (http://www.dipexinternational.org). The main goal of the DIPEx project is to give patients the opportunity to learn from others and to have access to free information distinct from that provided by medical experts or dubious internet sources. The interview data are also used in healthcare and inter-professional medical education. For more details see Ziebland and Herxheimer [14] and the information on the aforementioned websites.

Participants

Sample

We mainly recruited patients with assistance from primary care practices as they represent a broad variety of patients with diverse illness experiences. Other participants were recruited from self-help groups, local clinics or the wider local community e.g. Islamic centres. It was intended that this sampling strategy would also help ensure that we also included people who may be reluctant to regularly visit a doctor. Participants came from different urban and rural areas in Germany.

To assure a maximum variation of experiences, patients were recruited according to a proper age-sex-mix. After we had recruited about half of the sample, we conducted an interim analysis of the data. For this interim analysis, experts from health care, medical research, self-health groups and other relevant stakeholders were invited to form an advisory board. This advisory board scanned the interviews conducted and tried to find out whether or not relevant patients and/or types of the disease under study were missing. We became aware that we had predominantly recruited older people. As we were very interested to give younger people with type 2 diabetes a voice, we drew a second sample consisting of people in a younger age bracket. And as we also only had a few people with a severe course of the disease and major complications, we similarly considered it very important that people with a severe condition should find discussions from their peers on our website. So we also tried to include more people with severe conditions in the second period of sampling. During the subsequent analysis, saturation was considered achieved. People with severe cognitive impairments were excluded from the sample as it would have been very difficult for them to participate in narrative interviews.

Data collection

Interviews and interim analysis took place between 2008 and 2010. Interviews were conducted by qualified interviewers (UT being one of them) either one-to-one in the participant's home or in the department of the university. In order not to narrow down the experiences of the participants to predefined themes and assumptions, a narrative interview technique provided the basis of the website project. A narrative interview technique allows participants to express their experiences using their own words and the interview is structured according to areas relevant to them. The interview began with a section in which an open question invited the participants to relate their stories from the moment when they first suspected something was wrong with their health. Prompts and probes were used, when appropriate, to elicit further information. When the initial story was finished, a few follow-up questions were asked referring to, amongst other items, the doctor-patient-relationship and sources of support in diabetes care. All interviews were digitally recorded (32 interviews were videotaped and 3 interviews were audiotaped) and transcribed verbatim.

Analysis

While only small sections of the interviews are published on the website, we used the original narrative interviews for this study. The interviews were analysed according to the 'framework' approach [15]. This approach was originally developed for policy relevant studies but it is now widely used in qualitative health care research because it allows deductive and inductive research questions equally [16]. The procedure of analysis includes five steps: familiarisation, identifcation of a thematic framework, indexing, charting, mapping and interpretation. In the context of our study, this meant that first the interviews were read several times and discussed by

members of the research group. The issue of weight and experiences with dietary advice from GPs was identified as one dominant pattern in the data that looked promising for further investigation. Next, one of the authors (MW) developed a coding scheme and coded the transcribed interviews until saturation was reached, which meant that no further codes or categories could be found in the data. Initial coding was supported by the data analysis software ATLAS.ti, v5.1. We then charted the data according to the emerging framework of key themes in order to compare across the different cases. Analysis finally involved refining emerging concepts and finding associations between and within the interviews.

Rigor was ensured with continuing discussions during data collection and analysis within the research team. Moreover, two of the authors (UT and WH) coded large parts of the data in order to check the coding scheme and the emerging themes. In case of disagreement, codes and results were discussed until a consensus was reached.

Ethics

All participants gave prior written consent. The study was approved by the local ethics committee (University of Göttingen, Medical Faculty, no. 18/1/09).

Results

The total sample consisted of 35 participants (16 female, 19 male) aged between 35 and 77 years (mean: 59 years). The interviews lasted, on average, 104 (range: 43–220) minutes.

Nearly all patients talked about weight and diet in the interviews, most of them in a very detailed way. Their narratives about weight and diet could be placed into three interrelated categories: (1) difficulties with self-management and the role of the GP, (2) preferred styles of lifestyle counselling, and (3) dietary recommendations in a cultural context.

Difficulties in self-management and the role of the GP

The majority of participants were aware of the close connection between overweight and unhealthy eating. Many considered weight the cause of their condition. A strong feeling of personal responsibility was expressed in their narratives and weight reduction often was regarded as an integral part of diabetes self-management. Independent of their GPs' advice or admonition, patients often reported the need for discipline in order to reduce weight.

> Actually it was always my ambition to lose weight. Well…it concerns me and yes, of course, I would prefer to have a normal weight rather than being overweight […]. There are only disadvantages - no advantages whatsoever. Expensive, large sized clothes and impairments to health - these are not advantageous (ID 38, male).

Sometimes, their impulse for dieting developed over time and required self-monitoring. In a few cases an effort to reduce weight was not even assisted by the GP.

> And I say to myself: I waited and saw what happened over the last couple of months, but honestly, I am going to lose weight eventually. This does not come from my GP as he says: "Everything is fine and within reason". I have to do something (ID 32, male).

But many patients reported having problems with self-management and therefore attached great importance to their GPs' comments and advice on weight and diet. However, for these patients the nature of their disease did not prompt them to make changes. Patients remarked that an absence of pain and discomfort due to diabetes was a major obstacle to self-management and an adjustment to their lifestyle via a rigorous diet. They did not feel "real" pain as such, nor experienced any real limitations that reminded them of their illness.

Some participants indicated that they underestimated the potential consequences of diabetes and found it difficult to constantly keep track of weight and blood sugar levels. Although these patients stated that they were aware of the importance of weight and blood sugar levels, they found it difficult to adapt their behaviour to reflect this awareness. In spite of their fierce plea for self-management and self-responsibility, they often relied on their GP to bridge the gap between their understanding of the consequences and their motivation to take concrete action. This was frequently expressed as a desire to receive a wake-up call.

> If need be, he has to give me a wake-up call now and again and then I feel better afterwards and take care over my consumption of carbohydrates. That works wonders. We complement each other well (ID 34, female).

When this happens most respondents still took responsibility for weight related symptoms and valued the rebuke from their GP. The difficulty in self-control and self-management often made itself felt in terms of guilt, shame and misbehaviour.

> And when my sugar levels are quite high once more for a longer period of time I call the GP for an appointment and then I get my direction from her yet again. She is outspoken, you know; she doesn't hold back. I do appreciate that, you know. It is my own fault anyway (ID 36, male).

Preferred styles of lifestyle counselling

Although nearly all patients mentioned that they were referred to external nutrition counselling or to a rehabilitation facility, they reported that the topic of diet and weight was frequently discussed with their GPs. Apart from some people who did not necessarily expect dietary advice when consulting their GP, the patients could be roughly divided into two categories concerning the words their GPs should use in conversation about weight and weight reduction. While some patients appreciated a rather drastic form of communication, others regarded dramatic pictures as either unhelpful or even offending. In particular, those patients who insisted on self-responsibility but had difficulties in controlling body weight, valued clear words when it came to weight reduction. According to such patients, the GPs' words sometimes were seen as a 'turning point' and resulted in stricter weight management.

> Then he gave me a fierce telling-off; bit my head off, really. And I thought "Yes I know. I know it all". I was a nervous wreck and this was the decisive point for me to say "Yes - and now you do it [lose weight]" (ID 40, female).

> I am very happy with that GP and as I said he is straight-forward and tells you everything (ID 36, male).

For many patients concrete advice and a trusting relationship were the pre-condition for this style of speech. Patients who had a long-lasting relationship with their GP appreciated when he or she was forthright about the necessity of weight reduction.

> The GP would tell me straightaway that "this is not on, my friend". I like this GP a lot as I have the opinion that I can talk openly to him about everything, about my problems and so forth; that would not happen if I did not trust the doctor. Therefore I do understand when he is straight forward, as I know he means well (ID 36, male).

In contrast to the above, other patients criticised the physicians' instruction to reduce weight as a way to lay responsibility for a successful diabetes management with the patient. Patients in particular who previously indicated having trouble with self-management reported the need for detailed information on diet. For this group, the simple request to reduce weight was useless except when it was accompanied by concrete advice on how to achieve this.

> The GP really fired words at me, but I couldn't care less. All I can say is that this is a standard issue during all the conversations within a medical environment. Everyone seems to push one thing or another and everyone seems to agree that something can be achieved. Sure, what else can they do [...] and it is quite handy, of course, to say as soon as you are in the door "first of all you have to lose 10 or 15 kilos and then you will feel much better" (ID 31, male).

Patients also expected their doctor to acknowledge their difficult situation and their endeavours. Patients emphasised that their dietary habits are rooted in their biographical context and have developed over many years. For them, change was a long process even when agreed that it was necessary to prevent co-morbidities associated with diabetes.

> You cannot tell someone who has done the wrong thing for years: "If you lose weight it will change". It may be correct and you know it yourself anyway. But you have to bide your time, you have to talk and apply first aid (ID 49, female).

According to some patients, the very use of words concerning weight in the conversation was crucial. As the following statement suggests, the orthopaedic surgeon's choice of words and his disrespect made this woman feel offended. She thinks a more moderate style would make it easier for her to appreciate that her body weight is a problem.

> The orthopaedic surgeon did not know me at all and he came in, no "hello", no nothing; just turned around saying across his shoulder: "Have you always been that fat?" The word "fat" made me jump up of the couch fast. To this day I still do not know how I did it. And then I gave him a roasting which probably could be heard 3 rooms away. It would have been different if he had asked "Have you always been that size?" (ID 27, female).

Dietary recommendations in the cultural context

Although the majority of diabetic patients appreciated the doctors' attentiveness regarding problems of diet and weight, the most serious problem according to our participants, was the incompatibility of the dietary recommendations with daily life and their views of eating culture. In this context, the topic of eating culture refers to the social aspects of cooking and eating, the pleasure of a tasty meal and the relationship between food and identity. Again, it was primarily those patients with difficulties in finding a suitable diet on their own who reported that the advice from GPs and other health professionals about diet was persuasive in theory but unrealistic in practice. Back at home the information was

not capturing their eating habits or the environment in which they lived.

> Okay, I do not really adhere to it [the diet] as I am a chef by trade. I prefer to cook with butter and cream and it is not easy to change completely (ID 43, male).

> I cook what they [the children] like most. That's not necessarily healthy. But to cook two dishes – that seems stupid (ID 60, female).

Some patients more fundamentally criticised the philosophy behind the medical approach to diet that provided the basis for the GPs' lifestyle counselling and nutritional training.

> Eating is a matter of culture and I am very much interested in culture - just kidding a little bit. It is not just about the intake of food. […] I must have a sort of a blockage somewhere. If I hear at the back of my mind: "Yes, you have to". Yes, I do have to lose weight, of course. […] Um, well, the requirements to do this may not have been accepted yet by my subconscious mind (ID 41, male).

The patients' reluctance to change their whole diet to accommodate the requirements of diabetes care was present in many narratives. For example, patients did report deviating from a diabetes-adjusted diet sometimes. An individual's attempt to enjoy life overruled the strict instructions regarding diet. As the following quotation suggests, this could mean protecting those things that give meaning to life.

> A few sins here and there must be allowed. Otherwise life would have no meaning whatsoever (ID 33, male).

By and large, patients regarded themselves as compliant to the recommendations of their GPs. For them it was a matter of principle rather than a lack of knowledge since they were aware that a strict diet would be better for them given their condition. In this regard, it would appear that opting out of strict eating regimes becomes a sign of autonomy and therefore is a part of the individual identity.

> But I said that I am going to eat bread and dripping once a month – it has to be done (ID 57, female).

Some patients indicated that such deviation from a strict diet was allowed by their GPs. In such cases, they often assumed that their GPs accepted a lack of discipline now and then as long as it was only limited to a few situations.

Discussion

A GP's role in diabetes management is difficult and full of conflict given the ambiguities in patient self-management and the tensions between required lifestyle changes from the current lifestyle, especially with respect to food culture. The patients' self-management capabilities and different experiences of how to integrate dietary recommendations into daily life framed their perception and assessment of dietary counselling and determined their preferences concerning the style of communication from their GPs. Although a majority of participants considered weight the cause of their condition, they felt that strict diabetes management sometimes endangered their quality of life. Therefore, they insisted that some pleasures were necessary to maintain their well-being.

Research has shown that people with type 2 diabetes who regard an unhealthy lifestyle as a cause for their condition were more willing to take responsibility and to respond with diet and exercise than those who emphasised genetic factors [17]. Accordingly, most patients in our study regarded their individual lifestyle both as a major cause of their diabetes and an important factor in disease management. At the same time, our interviews revealed ambivalence for self-management. While most patients were aware of the important role of weight and diet in diabetes management, they also insisted on retaining eating habits they deemed crucial in maintaining well-being. This problem of navigating between discipline, culture and quality of life is not just an individual matter, but pervades the doctor-patient-relationship and therefore understanding this may help to better understand when and why GPs play such different roles for patients.

The lack of severe near-term consequences may provide an explanation for the positive role of the GP and other health professionals in diabetes care. Patients usually regard type 2 diabetes as not so serious than did healthcare professionals [18]. This is in line with the narratives of many participants in our study who also did not perceive their condition as painful or dangerous. Consequently they highly valued their doctor as someone who constantly points out the risks of type 2 diabetes. Furthermore, some of these patients either accepted or even favoured a more direct or aggressive style to address their failure with regard to diet and exercise. Doctors that highlighted this helped them to wake up and to remember the need for treatment compliance. While a Swedish study [12] in which diabetic patients, especially obese women, reported feeling humiliated and ignored when health communication was technical and without individual support, we would instead suggest a more complex view. The perception of lifestyle counselling seems to be not only a matter of communication, but it also relates to a patient's personal self-management capabilities and his or her resources. As an ethnographic study [19] has shown, these

different individual backgrounds highly influence patient self-management behaviour. However, our results would indicate that a patient's perception of the encounter is also relevant. In consequence, a rough communication style may not necessarily be perceived as offending but may be perfectly appropriate for some patients' needs.

With regard to the strong discipline that is normally required to maintain a diabetes adjusted diet, patients in our sample drew a line beyond which they deviated from their GPs' recommendation. They insisted on some pleasures that were formed and reinforced by the manifold variations in their backgrounds and therefore non-negotiable in lifestyle counselling. While empowerment studies recommend GPs to accept their patients' priorities [20,21], this might be a challenge. Not only are patient priorities and preferences sometimes in conflict with the guideline recommendations of diabetes management, but doctors, even those trying to avoid a paternalistic attitude, may feel uncomfortable when confronted with detrimental patient behaviour. As a study on hypertension [22] suggests, it might be necessary in this situation to give up conceptualising and assessing patient behaviour within a strict dichotomy of compliance and non-compliance. Instead, GPs should provide the time, privacy and patience to enable their patients to accept the diagnosis and to find their own way of managing their disease.

Many of our narratives can be viewed as documents indicating an ambivalent doctor-patient relationship. Superficially, this would seem to reflect difficulties integrating dietary advice, while useful and accepted by the patient, into everyday life. But a closer look at the narratives disclose a deeper conflict that seems to be rooted in the discrepancy between the world of medicine and the "lifeworld" of patients as Mishler [23] puts it. When doctors, following evidence-based guidelines for the management of diabetes, opt for a strict diet they will inevitably invade the patient's world. Patients may have the impression that not only their eating habits but also their entire culture will be taken over by medicine. Not surprisingly, patients may feel the impulse to protect their identities [13]. This kind of control over their own lives was apparent when the participants spoke about the limits of nutritional counselling. They appreciated when their conception of nutrition as a part of culture and integral component of well-being was shared and backed by their GPs, and included an occassional deviation from a strict diet. But some patients made clear in nearly a rebellious tone that no one should try to forbid them this occasional pleasure.

Strengths and limitations of the study

The open nature of narrative interviews allows the interviewee to speak about those things they regard as relevant. In most interviews the topic of weight and diet was addressed without a direct question from the interviewer. This appears to confirm the impression that weight and diet are of utmost importance to both the patients and the researchers. The role of primary care providers was often voluntarily addressed, too, emphasising the importance of these professionals and their expert dietary advice for diabetic patients.

There are nevertheless potential limitations to this study that should be noted. First, although narrative interviews are considered grounded in people's real lives [24], caution is recommended in the case of weight and diet. These issues receive significant attention in western cultures and our data may be influenced by the participants' attempts to present themselves as disciplined and adherent. Therefore, answers might be prone to issues of social desirability. Second, the GPs' assistance in recruiting participants might have resulted in selection bias because GPs could make a preliminary identification of patients. We tried to avoid this by asking different GPs from various areas. Third, three of 35 interviews were audiotaped instead of videotaped. This might lead to bias because there is no access to social cues if not videotaped. Finally, as with most results of qualitative research, the findings of the study presented here are exploratory and should be considered hypotheses.

Conclusions

Our findings suggest that patients' views on illness causation, their self-management capabilities and the different experiences of how to integrate dietary recommendations into daily life have a strong influence on their perception of diet counselling from their GPs. Although patients acknowledged the role of weight and eating in the aetiology of type 2 diabetes, they found it difficult to put this knowledge into practice. Dietary counselling therefore seems to be much more than the rational exchange of information. As a consequence, GPs should explore their patients' capabilities of self-management in open communication and accept their wish to protect nutrition as part of their culture. In the end they can only acknowledge that the control of diabetes management rests with the patient. However, since individual preferences strongly differ, future research should help doctors to find to a communication style that is aware of the needs of different patients and the pitfalls of addressing control and personal responsibility. Here, promising approaches such as motivational interviewing are well established and should be further implemented in primary care.

Competing interests
The authors declare that they have no competing interests.

Authors' contributions
MW analysed the data and wrote the manuscript. UTM conducted most of the interviews and contributed to analysis and discussion of findings. JK, GLH and WH designed the study and contributed to analysis and discussion of findings. WH supervised the manuscript. All authors read and approved the final manuscript.

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References

1. American Diabetes Association: **Standards of medical care in diabetes–2012.** *Diabetes Care* 2012, **35**(Suppl 1):S11–S63.
2. Marx J: **Unraveling the causes of diabetes.** *Science* 2002, **296**:686–689.
3. Laxy M, Mielck A, Hunger M, Schunk M, Meisinger C, Ruckert I, Rathmann W, Holle R: **The association between patient-reported self-management behavior, intermediate clinical outcomes, and mortality in patients with Type 2 Diabetes: results from the KORA-A Study.** *Diabetes Care* in press.
4. Ball L, Hughes R, Desbrow B, Leveritt M: **Patients' perceptions of nutrition care provided by general practitioners: focus on Type 2 diabetes.** *Fam Pract* 2012, **29**:719–725.
5. Noordman J, Koopmans B, Korevaar JC, van der Weijden T, van Dulmen S: **Exploring lifestyle counselling in routine primary care consultations: the professionals' role.** *Fam Pract* 2013, **30**:332–340.
6. Morrison F, Shubina M, Turchin A: **Lifestyle counseling in routine care and long-term glucose, blood pressure, and cholesterol control in patients with diabetes.** *Diabetes Care* 2012, **35**:334–341.
7. Fhärm E, Rolandsson O, Johansson EE: **"Aiming for the stars"–GPs' dilemmas in the prevention of cardiovascular disease in type 2 diabetes patients: focus group interviews.** *Fam Pract* 2009, **26**:109–114.
8. Svenningsson I, Hallberg LR-M, Gedda B: **Health care professionals meeting with individuals with Type 2 diabetes and obesity: balancing coaching and caution.** *Int J Qual Stud Heal Well* 2011, **6**:7129.
9. Beverly EA, Hultgren BA, Brooks KM, Ritholz MD, Abrahamson MJ, Weinger K: **Understanding physicians' challenges when treating type 2 diabetic patients' social and emotional difficulties: a qualitative study.** *Diabetes Care* 2011, **34**:1086–1088.
10. Paterson BL, Thorne S, Dewis M: **Adapting to and managing diabetes.** *Image J Nurs Sch* 1998, **30**:57–62.
11. Paterson BL, Russell C, Thorne S: **Critical analysis of everyday self-care decision making in chronic illness.** *J Adv Nurs* 2001, **35**:335–341.
12. Svenningsson I, Gedda B, Marklund B: **Experiences of the encounter with the diabetes team-a comparison between obese and normal-weight type 2 diabetic patients.** *Patient Educ Couns* 2011, **82**:58–62.
13. Broom D, Whittaker A: **Controlling diabetes, controlling diabetics: moral language in the management of diabetes type 2.** *Soc Sci Med 1982* 2004, **58**:2371–2382.
14. Ziebland S, Herxheimer A: **How patients' experiences contribute to decision making: illustrations from DIPEx (personal experiences of health and illness).** *J Nurs Manag* 2008, **16**:433–439.
15. Ritchie J, Spencer L: **Qualitative Data Analysis for Applied Policy Research.** In *Analysing Qualitative Data*. Edited by Brymann A, Burgess R. London: Routledge; 1994:173–194.
16. Gale NK, Heath G, Cameron E, Rashid S, Redwood S: **Using the framework method for the analysis of qualitative data in multi-disciplinary health research.** *BMC Med Res Methodol* 2013, **13**:117.
17. Parry O, Peel E, Douglas M, Lawton J: **Issues of cause and control in patient accounts of Type 2 diabetes.** *Health Educ Res* 2006, **21**:97–107.
18. Clark M, Hampson SE: **Comparison of patients' and healthcare professionals' beliefs about and attitudes towards Type 2 diabetes.** *Diabet Med* 2003, **20**:152–154.
19. Hinder S, Greenhalgh T: **This does my head in". Ethnographic study of self-management by people with diabetes.** *BMC Health Serv Res* 2012, **12**:83.
20. Anderson RM, Funnell MM: **Patient empowerment: reflections on the challenge of fostering the adoption of a new paradigm.** *Patient Educ Couns* 2005, **57**:153–157.
21. Funnell MM: **Patient empowerment.** *Crit Care Nurs Q* 2004, **27**:201–204.
22. Marx G, Witte N, Himmel W, Kühnel S, Simmenroth-Nayda A, Koschack J: **Accepting the unacceptable: medication adherence and different types of action patterns among patients with high blood pressure.** *Patient Educ Couns* 2011, **85**:468–474.
23. Mishler E: *The Discourse of Medicine. The Dialectics of Medical Interviews.* New Jersey: Ablex; 1984.
24. Hollway W, Jefferson T: *Doing Qualitative Research Differently: Free Association, Narrative and the Interview Method.* London: Routledge; 2000.

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8.3 Publikation III

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Experiences of food abstinence in patients with type 2 diabetes: a qualitative study

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ABSTRACT

Objective: People with type 2 diabetes often report pressure to abstain from many of life's pleasures. We tried to reconstruct these patients' sense of pressure to better understand how people with diabetes make sense of, and integrate, these feelings into their life.

Design, setting and participants: A secondary analysis of narrative interviews with 14 patients with type 2 diabetes who are part of a website project.

Main outcome measures: Grounded theory-based analysis of narrative interviews, consisting of open, axial and selective coding.

Results: People with type 2 diabetes felt obliged to give up many pleasures and live a life of abstinence. They perceived a pressure to display a modest culinary lifestyle via improved laboratory test results and weight. Their verbal efforts to reassure and distance themselves from excessiveness indicate a high moral pressure. With regard to the question of how to abstain, food and behaviour were classified into healthy and unhealthy. Personal rules sometimes led to surprising experiences of freedom.

Conclusions: People with diabetes have internalised that their behaviour is a barrier to successful treatment. They experience an intensive pressure to show abstinence and feel misjudged when their efforts have no visible effect. Taking into account this moral pressure, and listening to patients' personal efforts and strategies to establish healthy behaviours, might help to build a trusting relationship with healthcare providers.

Strengths and limitations of this study

- This narrative interview study was not led by pre-defined questions but was open to those aspects the participants considered meaningful.
- Following principles of 'theoretical sampling', we were able to conduct a secondary analysis of an extensive data set collected for a website project. Through careful interplay of open, axial and selective coding, an in-depth look was possible.
- Given the normative dimension of abstention, there is a chance of social desirability in the interviewees' answers and in their account of presenting themselves as disciplined and moderate.

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INTRODUCTION

Type 2 diabetes is a prototypic disease where lifestyle factors influence the onset and course of the illness—even more so than medical and pharmacological interventions do. Consequently, doctors are looking for ways to motivate their patients towards a healthier lifestyle and patients are struggling to better control their condition.

We know from innumerable studies that, for many people living with diabetes, the disease imposes lifelong self-discipline regarding diet, exercise and medication, and often results in a complete lifestyle change.[1–4] Moreover, several studies have reported diabetes results in social stigmatisation by peers, healthcare professionals and the media.[5 6] As a consequence, people with type 2 diabetes often report a reduced health-related quality of life.[7]

The paradigm of diabetes management focuses now on empowering the affected person through knowledge of managing the disease successfully and by improving their quality of life. This implies a collaborative approach in chronic care with the patient as a full partner in healthcare decision-making; this replaces traditional authoritative relationships with healthcare staff.[8 9] Although this approach is widely acknowledged, it is not yet an integral part of daily practice and, as Elissen *et al*[10] put it, medical professionals 'are talking the talk of patient participation, but are far from walking the walk'.

One reason for this shortcoming may be that health professionals are not fully aware of what it is like to live with the disease—the many challenges patients experience and how they reconcile them. For diabetes in

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particular, these challenges have an impact on almost all areas of life. Therefore it is necessary to give people the unrestricted opportunity to frankly report on their experience with this illness, and to analyse their accounts in an open and sensitive way. This study makes use of a large sample of narrative interviews conducted for the German website http://www.krankheitserfahrungen.de, part of the http://www.dipexinternational.org online network.

As suggested by grounded theory, we took a non-predetermined approach to data analysis and soon became aware that most interviewees felt a strong pressure to give up their former life and to abstain from nearly all pleasures. In the study presented here, we tried to reconstruct this feeling as a dominating patient with diabetes experience so as to come to a better understanding of how people with type 2 diabetes make sense of and integrate these pressures into their life. We used grounded theory also with the aim to learn more about causal factors for this feeling, including the role of doctors and medicine, seen from the patient's perspective.

METHODS

Context and setting

The study presented here is a secondary analysis of narrative interviews conducted for the website http://www.krankheitserfahrungen.de. This website is based on the idea and methods of the British http://www.healthtalkonline.org. It contains sequences from narrative interviews about the experiences of people suffering from chronic conditions. The German and British projects are both part of DIPEx International (http://www.dipexinternational.org). The main goal of the DIPEx project is to give patients the opportunity to learn from each other and to have access to free information distinct from that provided by medical experts or internet sources that are economically motivated, for example, to sell medical products.

The purpose of this study was to reconstruct the experiences of people with type 2 diabetes, including the role of doctors and medicine seen from the patient's perspective. In order to take an in-depth look at experiences the participants considered meaningful, our analysis followed the principles of grounded theory.[11]

Participants

The complete database consisted of 35 narrative interviews with patients having diabetes. Following a maximum variation sampling strategy that aims to provide a wide selection of experiences, the participants were recruited considering factors such as background, age and gender with the assistance of primary care practices, self-help groups, local clinics and local communities, for example, an Islamic centre.

Data collection

Interviews for http://www.krankheitserfahrungen.de were conducted by qualified interviewers one-to-one either in the participant's home or in a department of the University. All interviews were conducted in German. A narrative interview technique was employed so that participants could freely express what they considered important. The interview began with a section in which an open question invited the participants to relate their stories—from the moment they first suspected something was wrong with their health. Prompts and probes were used, when appropriate, to elicit further information. All interviews were digitally recorded (either videotaped or audiotaped), pseudonymised and transcribed verbatim.

Analysis

In grounded theory studies, data analysis is performed simultaneously with data collection and consists of three steps: open, axial and selective coding.[11] After reading all interviews, a randomly selected interview from our database was coded *openly* line by line in order to structure the data and to generate first assumptions about the content of the interviews. This process was facilitated by the analytic software ATLAS.ti. Theoretical memos, covering ideas about the data and remarks on recurrent topics of the interviews, were written during the whole analysis and guided the development of hypotheses. Following the concept of theoretical sampling, other interviews were selected from our dataset to draw minimal and maximal contrasting comparisons to further develop our hypotheses, and to integrate them into a larger theoretical framework. In our study, this was the topic of abstaining, which was present in most of the interviews and relevant to nearly all other topics. *Axial* coding was used to refine our preliminary concepts into more abstract categories and to explore the relationship between the categories. With *selective* coding, we connected the categories finding one 'story line' or theme. Overall, the main theme was the interviewee sense of obligation to live an 'abstinent' life. Analysis ended when saturation of concepts had been reached.

Ethics

All participants gave prior written consent.

RESULTS

Participants and key themes

We started the analysis with an interview chosen at random, that of Nadim (male, 35 years, table 1). A preliminary analysis led to the hypothesis that, in diabetes, being overweight plays an important role in the illness experience. On the basis of a memo written during the coding of the first interview, we chose Anna (female, 42 years), who also worried about weight and diet. She felt rejected by her doctors who, in her view, seemed to assume she was lazy as she did not lose weight.

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Table 1 Sample of interviewees and reason for selection

Person	Time of diagnosis and medication	Short characteristic	Reason for selection
Nadim (P32) ♂; 35 years	11 years ago; oral medication, long-acting insulin	Nadim changed his lifestyle radically after a heart attack; participated in a diet programme and fasting during Ramadan, which led to an intense experience of community and a successful weight loss	Weight problems/support from others
Anna (P30) ♀; 42 years	18 years ago; oral medication	Anna thinks her doctors always assume her to be lazy; does not lose weight although struggling very hard; husband and children wanting her to cook 'unhealthy' food	Feels disapproved of by doctors/ feels that having to abstain is unfair
Margaret (P21) ♀; 67 years	8 years ago; oral medication	Margaret feels having to abstain from little pleasures is unfair especially since she always has been slim while some overweight friends are not diabetic	Distancing oneself from those who indulge themselves
Thomas (P16) ♂; 57 years	3 years ago; no medication	Thomas gets compliments from the doctor for good laboratory values after abstaining from former habits, including eating unhealthy food and having beer as part of his group's activities	Radical change of lifestyle
Iris (P20) ♀; 54 years	7 years ago; oral medication	Iris wants to improve her lifestyle at her own speed and has tried some new activities such as caring for her body by swimming; makes her feel proud of herself	Individual rules of how to abstain
Lisa (P22) ♀; 52 years	6 years ago; Insulin	Lisa discovered that her blood sugar rises more when eating foods high in fat than those high in sugars	Individualised experience and explanation of eating habits and laboratory values
Katharine (P15) ♀; 73 years	3 years ago; oral medication	Katharine explains her weight problem as a genetic disposition and distances herself sharply from other overweight people	Distancing oneself from those who indulge themselves
Peter (P8) ♂; 73 years	3 years ago; oral medication	Peter struggles with the desire to have emotionally important food, for example, chocolate; is happy that he can 'admit' having a glass of red wine from time to time	Rules that fit personal needs/ feeling approved by the doctor
Luise (P1) ♀; 51 years	11 years ago; first oral medication, now insulin	Luise feels resigned to being overweight by doctors; seems to her like a 'death sentence'	Feeling resigned to being overweight and laboratory values
Klaus (P2) ♂; 64 years	5 years ago; oral medication	Klaus since diagnosis feels that 'every pleasure like his Sunday roast is forbidden; is tired of the repetition of this advice during each medical consultation	Feeling that having to abstain is unfair
Jonathan (P3) ♂; 57 years	10 years ago; oral medication, sometimes long-acting insulin	Jonathan considers eating and being overweight is a result of living in a family of the after-war-generation; bullying also leads to eating out of frustration	Weight problems/no support from others
Max (P6) ♂; 52 years	25 years ago; oral medication and long-acting insulin	Max describes his wife as a 'second will' and warning signal when he eats too much; often 'escapes' from the rules to have a 'nice party'	Wanting external restrictions
Katy (P27) ♀; 65 years	24 years ago; insulin	Katy supposes that the only way to change lifestyle would be if her doctor would exile her on a lonely island where she can no longer be tempted by unhealthy food	High laboratory values; even if she eats next to nothing
Maria (P29) ♀; 65 years	32 years ago; insulin	Maria was disappointed and felt neglected when her doctor told her that her laboratory values do not always have to be perfect	Feeling that doctors do not care/ being ambitious about having good laboratory values

In parallel, we selected Margaret (female, 67 years), who reported that she had always been slim and received a lot of approval from her doctor for having almost normal laboratory values. Table 1 shows how we continued to select further interviews, in order to find minimally and maximally contrasting cases, and after considering additional attributes such as age and gender.

Saturation was reached after having included 14 of 35 interviews. The final sample comprised eight women

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and six men, with a mean age 57.6 (range 35–73) years; duration of illness ranged between 3 and 32 years. For the purpose of illustration, we provide translated sequences from our interviews in the following chapters.

A key theme of all interviews was the strongly felt pressure to abstain ('*verzichten*' in German) from culinary treats and other pleasures. We detected four subcategories that helped to generate a complete picture and a deeper understanding of the experience of 'verzichten': (i) the pain of abstaining from former pleasures; (ii) moral pressure to prove abstinence instead of excessiveness; (iii) how to abstain and (iv) abstention as freedom.

The pain of abstaining from former pleasures

While elevated glucose levels were usually not perceptible, abstention from culinary favourites was painfully evident and affected a patient's sense of well-being, resulting in permanent feelings of hunger and thoughts about eating, sometimes enhanced by insulin. Abstention related to, for example, emotionally significant favourite dishes and sweets. While other people of her age would enjoy a communal, 'well-deserved' pleasant meal, Margaret, for example, felt excluded from such social events having instead only 'dry crisp bread' (box 1, quote 1). Using strong words, Klaus (box 1, quote 2) expressed his impression that for people with diabetes every treat is 'generally' forbidden.

Feasts are a particular challenge. Not only are they centred around eating, they can also revitalise positive feelings from the past. In Peter's narrative (box 1, quote 3), we witness a highly emotional struggle resisting and yearning for familiar culinary pleasures. Parties and ceremonies represent a further threat that can undermine efforts to change behaviour. Consequently, interviewees often felt excluded from social activities or unable to participate, as in the case of Thomas (box 1, quote 4), in order to resist any temptations.

Moral pressure to prove abstinence instead of excessiveness

Nearly all interviewees felt evaluated by visible and measurable criteria, such as appearance and body weight, respectively, or laboratory values. This evaluation took place mainly in the medical area but also in the interviewees' social environment. Those with poor values feared moral condemnation for a supposed lack of discipline even if they had tried hard to change their behaviour but without visible effect. The fear of being morally discredited was apparent during the interviews to such an extent that nearly all interviewees emphasised that they lived moderately and distanced themselves from all forms of self-indulgence (box 2, quotes 1 and 2). Several interviewees confessed to have eaten unhealthy food from time to time, characterising their behaviour as occasional lapses, hoping to receive forgiveness (box 2, quote 3).

Box 1 The pain of abstaining from former pleasures

Margaret, 67 years, P21:318, 65–269
And, as the doctor just said, you need to abstain from really any (stutters) any kind of white-, um, wheatbread stuff and (…) well, I thought, that's hard, well, you're not going to do (this)… And just now with my retirement I was really looking forward, actually, to those afternoon coffee treats. (…) Yes, and these, well, a colleague also told me so, don't take it so seriously and so on, but I really pulled this through. Yes, with cake. But I find it difficult, yes. Munching some kind of crisp bread in the afternoons.

Klaus, 64 years, P2:055
Honestly, you are then handed from one seminar on nutrition to the next: they always tell the same stories, I am not to drink beer anymore, I am not to eat any pork knuckle, oh, my Sunday roast is forbidden, and, and, and, oh, everything is forbidden, this is so on principle, that is just the other end of the scale, I am not allowed anything, I'm just going home, they can kiss my ass, they achieve just the opposite of what is aimed for.

Peter, 73 years, P8:0646–0652
There's chocolate bunnies and stuff like that for the children all over the place for Easter, of course, you know, and that certainly means temptation, I had, just now for Easter, my wife had bought chocolate bunnies, and I hadn't really registered that. One of them, um, was made of dark chocolate, and I (laughs) I had read just before this that dark chocolate would be better for diabetics, if one *had* to have chocolate, that is, and then my wife said: "Yes, because—the kids don't like this anyways, so this is for you." Then I (clears his throat), well, for two weeks (laughs) I looked at this bunny and then I really went for it, bit off the ears at the top, and then, of course, this is also a fond memory, when I had eaten bunnies more often, but then one has to, um, overcome one's inner weaker self and resist. Then one has to put this aside and at a later time another piece.

Thomas, 57 years, P16:0826–0828
Oh well, it starts with much-loved habits, um, with my group of regulars, for instance, where one always went to and used to have a couple of pints down the pub (…) I want to lose weight, I um, I do not go out to eat, I don't go to the pub. This just doesn't work for me, I don't have what it takes, y' know, 'cause, it just doesn't make sense, umm, just so, um, on one hand count the three carbohydrate units and on the other, um, eat a plate heaped full in a pub, or something like that, and then I just said, I'd rather stay home.

When Margaret visited her doctor she was always excited to learn her laboratory values. The medical assessment appeared to represent a benchmark of successful abstention. While talking in the interview about her doctor's praise, she presented herself as hard-working and abstinent (box 2, quote 4). Because of her good laboratory values, she felt rewarded and morally bolstered by her general practitioners' comments. In contrast, the next example shows how stressful a consultation may be when the results are poor, culminating in a 'death sentence' (box 2, quote 5).

Another narrative mirrors the enormous strain of internal and externally perceived moral pressure: Anna reported about the injustice of not losing weight in spite of her substantial effort while other people seem

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to manage it easily. She feared that others might draw false conclusions about her eating behaviour. By contrasting the gluttony of others and her own restraint, she defended herself against any potential suspicion of misconduct. She demonstrated her own efforts to restrict her diet and was not the least frustrated because there were no visible results (box 2, quote 2). The moral pressure is also evident in Peter's account (box 2, quote 6). He felt caught by his general practitioner in a supermarket because he had a crate of beer and anticipated his doctor's possible comment although he did not know what his doctor really thought. The mere presence of his doctor in the market put pressure on him.

How to abstain

All interviewees knew and accepted the medical advice that they needed to change their lifestyle but many did not know how to go about doing so. While health professionals may consider laboratory values and weight as clear indicators of adoption of an improved lifestyle and abstention from culinary treats, many of our interviewees often desperately looked for practical guidance. Doctors were often perceived as demanding strict abstinence or, as Klaus (box 3, quote 1) recounted, seemed to require weight reduction as a prerequisite for treatment. Anna (box 3, quote 2) felt that her doctors believed she was not trying hard enough as her blood sugar level remained too high.

When forced to develop personal rules of how to abstain, some interviewees considered the blood sugar measurement an essential indicator. It could be used to adapt the call for change and abstinence by 'trial and error'. Some interviewees reported how they learned what and how much they had to give up. In turn, they also learned what things are 'allowed'—for instance, if the test results remained within a tolerated range—or how to compensate for a 'lapse'. Then abstinence did lose some of its rigorousness (box 3, quotes 3 and 4).

Good blood sugar readings motivated patients to continue their efforts. In contrast, those patients whose readings did not mirror their efforts and contradicted the paradigm of abstinence, were confused. If they constantly experienced not being able to change their laboratory values or their weight, they began to look for other criteria for a successful lifestyle change. Anna (box 3, quotes 5 and 6), for example, appreciated the advice from a support group, which emphasised well-being as opposed to laboratory values.

The assessment and classification of food was a recurrent theme. Similar to the classification into abstinent and excessive people, food was divided into healthy and unhealthy. Unhealthy dishes were classified—or perceived—as 'forbidden'. If they were, nevertheless, consumed, the interviewees tried to justify their behaviour. Iris gave a detailed account of her desire to have mayonnaise. First she emphasises her desire to be like everybody else and sometimes has a craving for something ('ravenous appetite'); it is 'human' and you cannot control it. She adds 'a good dollop of mayonnaise and enjoys living thoroughly decadently'. While confessing a 'sin', she legitimises it by underlining how little she ate and how she now feels well and capable of abstaining again. The argumentative effort is impressive and again demonstrates the enormous pressure in even trivial decisions.

Box 2 Moral pressure to prove abstinence instead of excessiveness

Luise, 51 years, P1:521
Only he (the general practitioner) must not compare obese with obese. I am not fat because I eat too much. But there are fat people who are fat because of the food they eat. Understand, that's a difference.

Anna, 42 years, P30:093
Why do other people do it like that? No idea. (…) Perhaps to top their, um, their dishes, what they simply (pour into themselves by way of food). (…) Well, I am steadfast, I, well, I tell this to the doctors every time (…) "You, you don't know how difficult that is, sometimes, for me, to stand there and, um, abstain." (…) This really is a fresh fight each and every time.

Katy, 65 years, P27:110
… but once I ate a whole block of chocolate, with chillies, I wanted to try this. These bars are just wafer-thin, aren't they? (…) Four, five bars throughout a day. (…) (Then) I told my husband: "You know, I just ate a whole block of chocolate." And he said: "You know, you simply needed this for once."

Margaret, 67 years, P21:570
And (the doctor) has all this in her computer and (I) am really incredibly keen to know, is it the same or isn't it higher. (She) encourages me to continue, and sometimes even says "Well, you know, you don't need to live in denial. Okay? You. Spoil yourself a little." (laughs) It always sounds so, so forbidden, the way I treat myself.

Luise, 51 years, P1:545
Yup, just a regular check-up. That is due every 3 months, I need to go firs-first in the morning on an empty stomach for a blood sample and 2 days later I need to go there to discuss the results. And for the past half year I always went there with the hair on my neck standing up, I thou- because I thought all the time: what now, what next, you know. (…) Because one is aware of it, when one's measured it all oneself, and there are only high values in the measurements, then the (long-term) value cannot be great either, you know. Well, and if that's the case I am under pressure again, and then I go to this appointment and say: "I want my death sentence."
Interviewer: And that means?
Luise: Well, he can run me ragged again, can't he. (laughs)

Peter, 73 years, P8:0977
W-w-we (the doctor and I) visit the same beverage and drinks shop, and by chance he came around the corner with a crate full of mineral water and I co-incidentally carried a box full of beer (laughs) and he—we didn't need to really talk about it—he let me know in no uncertain terms that it would have been better by far if I had likewise (laughs) taken a crate of water, but I told him when I next saw him at his office: "The beers were not for me at all. You do know, don't you, that I'm a wine person. Bought that for my boys" (laughs).

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Box 3 How to abstain

Klaus, 64 years, P2:055
But I can only say that this (neck standing) is a typical topic of all medical persons. All insist on it and nag (…) they all have an eye on the success, of course, and, um, it really is easiest to come into the room and say right away: "Loose 10, 15 kg, and, um, then you'll feel better." It's quite clear, it's very nice, it's correct, no problem, tell me how to do it and I'll do it.
Anna, 42 years, P30:215
They (the doctors) always say (…): "Well, you are young. Try to do this under your own steam (…)." But over the years the values remain too high, and nothing ever works. When they then think: "See, maybe she isn't following the dietary instructions." (…) They just say: "You know, then we'll not do anything, either."
Margaret, 67 years, P21:534
We-ell, and that has proven, up until now, that if and when I go across to the bakery after all of an afternoon, and they have freshly made cream puffs, you know, then (I'll) enjoy a cream puff, okay? And I really relish it. Yes, and the values just show that this isn't all wrong, either.
Thomas, 57 years, P16:1281
So I ate, um, something I don't usually eat throughout that whole weekend, and lo and behold, I had gained four pounds on Monday, you know, immediately, you know, and then I returned on Monday to my old way of life. Just ate, um, potatoes and veggies…
Anna, 42 years, P30:093
Okay, sometimes I eat a little too much. When I have a second helping, despite everything, then I know that it (the blood sugar level) is high, you know. Sometimes when I eat (the same thing) 2 days in a row, I get two different results
Anna, 42 years, P30:302
Well, since I've joined this support group, my sugar level has become worse instead of better, with all these recommendations, and here and there, and so on, you know. But I also see, um, the recommendations are spot on and helpful.
Iris, 54 years, P20:393
Mustard instead of butter with cheese on your bread tastes quite good, you know. You've just got to find something for yourself where you can say: "Look, I've done without something—the butter, in this case." This way you do without something and still be satisfied, maybe even a little proud. It's very important to have something that one is satisfied and even proud about. You just can't deprive yourself of everything nice all at the same time.

Sometimes, the interviewees described abstaining as an easy task, again obviously with the aim to draw a line between those who supposedly overindulge themselves or to legitimise emotionally important food. Margaret for example, reported to have never liked milk chocolate but only the 'healthy' dark chocolate. Katy told us to eat 'only' half a chicken. Peter admitted happily to having wine instead of beer, even approved by his doctor.

These examples show that the uncertainty of how to abstain often represented a burden, especially after the initial diagnosis. At the same time, it may give some patients freedom to define food that is emotionally important for them as healthy. Or they can create rules they can adhere to without excessive pain, which contributed to a feeling of success in the case of Iris (box 3, quote 7).

Abstaining as freedom

There were several remarkable exceptions where abstinence was not experienced as an internal or external pressure but acknowledged to have changed life positively. Some people, for example, Thomas (box 4, quote 1), discovered new areas and positive experiences when changing lifestyle, sometimes supported by the spouse.

While fasting during Ramadan, Nadim (box 4, quote 2) discovered a form of abstinence. For him this was a radical behaviour, against all medical advice, but at the same time liberating. That this happened during Ramadan might have strengthened the experience since he did not feel excluded or left alone when having to abstain.

In some cases, social withdrawal from various obligations, typically family obligations, was viewed positively. Iris, for example, had a new ritual. She sometimes had a shower in the evening, lit a candle and did not want to be disturbed by her family. While she commented on the many demands on her as a mother and as a diabetic person, her illness gave her the opportunity to enjoy some daily time for herself, as opposed to indulging in food. Nadim (box 4, quote 3) told us about a similar experience, where physical activity no longer felt like a penalty but, rather, as a type of reward.

Box 4 Abstaining as freedom

Thomas, 57 years, P16:1680–1729
It agreed really well with me, that was kind of, um, the second pillar in addition to losing weight, but there is a need for discipline (…) My wife (…) joins me (…) and we go our rounds, regardless of the weather, at 6:30, 7pm or even later than that (…) So by doing this, it is agreeable (…) One feels actually (…) even though hungry (…), one feels (…) also okay, well (…), capable.
Nadim, 35 years, P32:348–352
And the month was really wonderful, full of intense experience. Um, in the evening we were served dinner, not for me. I drank my bags. Um, it is strange, all around you eat, only you have your shake and drink that. But you can believe me, it really was, um, very wonderful. It was, well, it was the best fasting month that I have experienced in a long time. It was, you saw all kinds of things in the mosque. I really was intensely included in all of this. Even in the kitchen I was included. (…) Well, as I said, that's the thing that made me go on this trip: I can change this. I can change this, not some medication, not insulin, not even the doctor. He's not with me. I am.
Nadim, 35 years, P32:433
I ride my bike for an hour every day after work. It was a revelation, there is something beyond work, home, being at home and with the family. Just shut down, an hour just for me. This was new for me. That's why I say: "Once you get told the diagnosis, take a break." I should have done that much earlier. Go outside to see that there is something else. Life can be different.

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DISCUSSION

Pressure to give up a previous lifestyle was a core experience for people with type 2 diabetes. Body measurements, especially weight, and laboratory values, were often seen as 'benchmarks' of successfully abstaining from forbidden culinary pleasures—not only for health personnel but also for diabetic people. Being afraid of moral discrimination, many of the interviewees invested huge efforts to distance themselves from appearing self-indulgent and excessive. In rare cases, abstaining from former pleasures became a positive experience.

The greatest advantage of this study is the openness of the interview situation, which was not led by predefined questions.

Although 'theoretical sampling' seems problematic in secondary analysis because the data are already 'given', the usual interplay of coding and sampling is still possible by carefully selecting data, namely, people from the available sample. It should be emphasised that all the interview material was accessible, as recommended by Heaton,[12] and not only those parts published on the internet. Even if analysis was conducted with the original interviews held in German, the translation of parts of the interviews for presentation in this paper may have altered the meaning of the participants' statements—especially the German term 'verzichten', which was the key theme in the interviews, and is difficult to capture in other languages because it refers not only to food consumption but also contains the moral requirement to change a considerable part of one's life.

Given the normative dimension of abstention, there is a chance of social desirability in the interviewees' answers and in their account of presenting themselves as disciplined and moderate. Even if they presented a behaviour in their narratives that they did not show in real life, this does confirm the strong pressure to abstain, as it has become an almost natural way of self-presentation in social interaction.

While a major aim in the treatment of chronic illness is to restore or improve well-being and the quality of life, this does not seem to be an accepted target for people with diabetes. From their initial diagnosis, patients need to fight thereafter against their needs and wishes. Swedish women interviewed by Ahlin and Billhult[13] reported a 'continuous struggle' to change their lifestyle and felt victims of pressurising demands, similar to the interviewees in our study. Many of the Swedish women described a feeling of life being meaningless if they were unable to live it in the way they were accustomed. They wanted to enjoy life but the demands for a change in lifestyle created great conflict in their lives. Also, women in a Brazilian study[14] showed strong feelings of rage and hate not the least because of feeling pressurised to perform exercise, take medication every day and abstain from their beloved sweets. The results of our study suggest that this feeling is intensified by the impression that patients with diabetes have a higher obligation than others to follow the universal medical advice to live healthy.

It was Broom and Whittaker's study[15] that showed patients with diabetes used a moral language positioning them either as disobedient children or foolish adults. We also observed this moral language and saw how it can be traced back to the consultation room and the social environment, where laboratory findings and body measures are interpreted as benchmarks of having lived modestly, at least in the eyes of our interviewees. Even in the area of shared decision-making and patient–physician partnerships, many diabetic people feel dependent on their doctor's moral judgement, awaiting their 'death sentence' when they have lapsed. This is in sharp contrast to most other chronic conditions. Laboratory findings that got worse in a case, for example, of cancer or similar disease, would be followed by an emphatic reaction. Many interviewees in our study found their doctor accusatory or had at least anticipated such a reaction when the test results were poor. They felt the need to distance themselves from overweight people and excessiveness.

Our interviewees' fear to be stigmatised because of their self-indulgence seems to reflect the public discourse that merges diabetes and obesity, without sufficient evidence, into a new social health problem, coined 'diabesity', 'obesity risk diabetes', 'obesity causes diabetes', or 'weight or fat causes diabetes'.[16] This fear of moral discrimination is also felt when our interviewees pictured themselves as disciplined, to avoid any suspicion of self-indulgence and leading an unhealthy lifestyle. Browne *et al*[5] cite a woman who calls her diabetes a 'blame and shame disease'. The negative stereotype against obesity was also observed in health professionals and medical students.[17–20]

The pressure to abstain from all culinary pleasures often resulted in the wish to delegate responsibility to external forces, in the end to bariatric surgeries, or the suggestion that the health professional should stock the refrigerator.[21] In addition to these fantasies, our interviews documented the lifelong fight of how to find tolerable ways to abstain from habits and pleasures of a previous life. One way to do this is to define 'rules', including the classification of food as healthy or unhealthy, giving some patients a surprising freedom to orient themselves towards other criteria of a healthy lifestyle such as well-being.

Abstaining from former pleasures and habits could also be perceived as beneficial even if only a few patients reported this experience. Similarly, patients in Japan considered the diagnosis of diabetes as a chance to change their life.[22] This is in line with reports of interviewees in our study with the most particular case of a Muslim who used Ramadan to begin to fast and described this as an enthusiastic experience. It should be emphasised that he, like other interviewees, described this behaviour first of all in terms of abstention and, much later, as a new positive experience.

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CONCLUSION

Abstaining from former culinary treats was a core experience of nearly all interviewees, expressed as the feeling of giving up a previously enjoyable life forever. Our patients all felt under high internal and external pressure to demonstrate a healthy lifestyle. The main origin of this pressure was not so much the fear of diabetic complications but the moral dimension of the disease. In this regard, laboratory values are interpreted as benchmarks of success that could either strengthen a patient's own efforts or undermine the moral status. Diabetic people have internalised the distinction between self-discipline (thin people) and excessiveness (heavy or overweight and obese) and are eager to avoid any association with excessiveness. Doctors and nurses are often perceived as controlling and pressurising without giving advice with regard to how to put medical recommendations into practice. Interestingly, most of our interview partners had received dietary advice or even visited specialised clinics that provide self-management programmes, including advice for lifestyle change and exercises, specifically, of how to control calories and to lose weight by physical activity. However, several of them were disappointed and reported how far off these exercises were from their real life, and described the advice and exercises as often being irrelevant for everyday use. In some instances, the educational programmes even increased the pressure to live a joyless life.

One of the most striking results is that more or less all participants were aware of the association between lifestyle and their condition. So, informing diabetic people again and again to change their life, to do more exercises, to eat less and to lose weight, might not be necessary, and if it were, it should be carried out very carefully. Most of them are already aware of these recommendations and they often feel discriminated if their efforts to change lifestyle are not sufficiently appreciated by medical practitioners. This is regarded as unfair, especially if the body seems 'unpredictable'; many diabetic people have the feeling they cannot, or can only to a limited degree, influence the test results.

A first step to break the vicious circle of judgment and frustration could be to appreciate the patients' efforts even if body measurements and test results are disappointing, and not to automatically conclude that poor measurements represent poor effort. Both parties should know and accept that measurements do not necessarily mirror behaviour.[21]

Instead of exerting even more pressure on patients with diabetes, doctors and nurses should inform patients about the dangers of moral pressure and that recommendations to change lifestyle should not be understood as an accusation of previously poor behaviour. It could be helpful if doctors and nurses acknowledge many patients struggle with the pressure to change their lifestyle, and set up their own rules.[4] Many seem to be aware of their own responsibility and potential for self-management, but often need room and freedom to shape their life and putting demands into reality. It would be helpful to listen to diabetic sufferers and their strategies. A new role for doctors in diabetes management may be to give patients room to experiment and to support them, to find out what works and helps them best. Doctors could encourage patients to implement small, sustainable changes in their lifestyle behaviours, and be mindful that, in reviewing each patient's progress, they display unconditional positive regard and empathy.

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REFERENCES

1. Whittemore R, Chase SK, Mandle CL, *et al*. Lifestyle change in type 2 diabetes a process model. *Nurs Res* 2002;51:18–25.
2. Yannakoulia M. Eating behavior among type 2 diabetic patients: a poorly recognized aspect in a poorly controlled disease. *Rev Diabet Stud* 2006;3:11–16.
3. Ingadottir B, Halldorsdottir S. To discipline a "dog": the essential structure of mastering diabetes. *Qual Health Res* 2008;18:606–19.
4. Oftedal B, Karlsen B, Bru E. Life values and self-regulation behaviours among adults with type 2 diabetes. *J Clin Nurs* 2010;19:2548–56.
5. Browne JL, Ventura A, Mosely K, *et al*. 'I call it the blame and shame disease': a qualitative study about perceptions of social stigma surrounding type 2 diabetes. *BMJ Open* 2013;3:e003384.
6. Schabert J, Browne JL, Mosely K, *et al*. Social stigma in diabetes: a framework to understand a growing problem for an increasing epidemic. *Patient* 2013;6:1–10.
7. Wandell PE. Quality of life of patients with diabetes mellitus: an overview of research in primary health care in the Nordic countries. *Scand J Prim Health Care* 2005;23:68–74.
8. Thorne SE, Ternulf Nyhlin K, Paterson BL. Attitudes toward patient expertise in chronic illness. *Int J Nurs Stud* 2000;37:303–11.
9. Burke SD, Sherr D, Lipman RD. Partnering with diabetes educators to improve patient outcomes. *Diabetes Metab Syndr Obes* 2014;7:45–53.
10. Elissen A, Nolte E, Knai C, *et al*. Is Europe putting theory into practice? A qualitative study of the level of self-management support

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in chronic care management approaches. *BMC Health Serv Res* 2013;13:117.
11. Corbin JM, Strauss AL. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications, 2008;3.
12. Heaton J. *Reworking qualitative data*. Sage, 2004.
13. Ahlin K, Billhult A. Lifestyle changes—a continuous, inner struggle for women with type 2 diabetes: a qualitative study. *Scand J Prim Health Care* 2012;30:41–7.
14. Peres DS, Franco LJ, dos Santos MA. Feelings of women after the diagnosis of type 2 diabetes. *Rev Lat Am Enfermagem* 2008;16:101–8.
15. Broom D, Whittaker A. Controlling diabetes, controlling diabetics: moral language in the management of diabetes type 2. *Soc Sci Med* 2004;58:2371–82.
16. McNaughton D. 'Diabesity' down under: overweight and obesity as cultural signifiers for type 2 diabetes mellitus. *Crit Public Health* 2013;23:274–88.
17. Poon MY, Tarrant M. Obesity: attitudes of undergraduate student nurses and registered nurses. *J Clin Nurs* 2009;18:2355–65.
18. Schwartz MB, Chambliss HO, Brownell KD, *et al*. Weight bias among health professionals specializing in obesity. *Obes Res* 2003;11:1033–9.
19. Teachman BA, Brownell KD. Implicit anti-fat bias among health professionals: is anyone immune?. *Int J Obes Relat Metab Disord* 2001;25:1525–31.
20. Miller DP, Spangler JG, Vitolins MZ, *et al*. Are medical students aware of their anti-obesity bias? *Acad Med* 2013;88:978–82.
21. Parry O, Peel E, Douglas M, *et al*. Issues of cause and control in patient accounts of type 2 diabetes. *Health Educ Res* 2006;21:97–107.
22. Yamakawa M, Makimoto K. Positive experiences of type 2 diabetes in Japanese patients: an exploratory qualitative study. *Int J Nurs Stud* 2008;45:1032–41.

Lebenslauf

Ich wurde am 15.11.1982 in Mettingen geboren. Von 1988 bis 2002 besuchte ich Grundschule, Realschule und höhere Handelsschule (Hüberts'sche Schule) in Hopsten, wo ich mein Abitur absolvierte (Note: 1,9). Es folgte der Zivildienst im Elisabeth Hospital Ibbenbüren. Im Oktober 2003 erfolgte die Aufnahme des Studiums der Fächer Soziologie, Sozialpolitik und Philosophie an der Georg-August-Universität Göttingen. Das Wintersemester 2007/08 absolvierte ich als Auslandssemester in Groningen (Niederlande). Im August 2009 schloss ich das Studium mit dem Titel Magister Artium ab (Note: 1,0). Es folgte eine Anstellung als wissenschaftlicher Mitarbeiter am Institut für Allgemeinmedizin der Universitätsmedizin Göttingen bis zum März 2010. Im Sommersemester 2010 war ich als Lehrkraft für besondere Aufgabe (LfbA) an der Universität Kassel beschäftigt. Im Oktober 2010 nahm ich das Studium der Humanmedizin an der Georg-August-Universität Göttingen auf. 2012 absolvierte ich den Ersten Abschnitt der Ärztlichen Prüfung (Note: 2,0), 2016 folgte der Zweite Abschnitt der Ärztlichen Prüfung (Note: 2,0). In der Zeit von 2010 bis 2016 war ich mehrfach als wissenschaftliche Hilfskraft im Institut für Allgemeinmedizin der Universitätsmedizin Göttingen beschäftigt. In dieser Zeit sind die Publikationen entstanden, die als Grundlage dieser Dissertation dienen.