

Experiences of general practitioners with prolonged -one hour- consultation time in socio-economically deprived areas: a mixed-methods study.

Author: F.R. de Graaff (student researcher primary care Radboudumc)

Supervisors: Prof. Dr. METC van den Muijsenbergh (general practitioner, professor of health disparities and person centred integrated primary care Radboudumc)

Dr. B. Rikken (general practitioner, chairman Utrechtsfondsachterstandswijken)

Department: Primary Healthcare Radboudumc, Nijmegen

Period: May - July 2018, 12 weeks

Date: 30 July 2018

Abstract

Background

General Practitioners in socio-economically deprived communities have a challenging profession as they have to deliver high-quality care within limited timeslots. This population is to a great degree time-consuming, because of 'complex' patients presenting with (more than one) medical problems which are intertwined with psychosocial issues and are coloured by context. Recent studies are inconclusive about the effect of prolonged consultation time, but were not performed in socio-economically deprived communities despite the fact that this population could benefit from it. Therefore, study of prolonged consultation time in deprived communities is necessary to determine if it contributes to enhanced high quality patient-centred care in this population.

Aim

To describe what patients were involved in one-hour consultations and to elucidate general practitioners' experiences in terms of implementation and effects when using one-hour consultations in socio-economically deprived communities.

Method

This was a mixed-methods study in which data was collected from declaration forms and questionnaires for a descriptive quantitative overview of patients involved. Besides, semi-structured in-depth interviews were held with nine GPs to get insight into their experiences. These were evaluated following the principles of thematic analysis.

Results

Eighteen general practitioners had 79 one-hour consultations with 78 patients between 7-4-2017 and 31-5-2018. Many consultations were held with elderly (65< years) or with 'vulnerable' patients. Frequent reasons were: new patients, frequent attendees, out of view, old aged and complex patients. Implementation was sometimes challenging due to GPs limited time available. Most positive experiences of prolonged consultation were: more effective referrals and appropriate, coordinate care. In addition, GPs experienced more trust and enhanced self-reliance of patients.

Conclusion

This is one of the few studies that illustrate views and experiences of GPs who held one-hour consultations in socio-economically deprived areas. Although limited time was an obstacle for implementing this intervention, GPs experienced many positive effects, and no negative, effects. For now, it's a necessity to expose patients' experiences with one-hour consultation and determine long term outcomes.

Table of contents

Introduction.....	4
Methods	5
Results	7
Quantitative results.....	7
Qualitative results: experiences of participating GPs	10
General positive attitude regarding the prolonged consultation	10
Choosing the intervention.....	10
Patients elected for the one hour consultation	12
Organisation of the consultations: preference for multidisciplinary consultations	12
Organisation of consultations: using 4D model	13
Impediments to overcome	14
Effect of one-hour consultations.....	16
Discussion	19
Summary of findings and comparison with other studies	19
Strength	20
Limitations	20
Implications for future research and clinical practice	20
Conclusion	20
References.....	21
Appendix: elaboration patient characteristics	23

Introduction

In the Netherlands general practitioners (GPs), as gatekeepers to specialist care, are closest to the patient in offering low-threshold care. As medical problems are intertwined with psychosocial problems and coloured by contextual factors like family structure, income, and education. One of the core values and goals of GP care is to offer continuous, patient-centred care with ample attention for the personal context of the patient [1, 2]. Unfortunately, this is difficult to achieve within the 10-12 minutes timeslot available for consultations in general practice. It is especially a challenge when working in socio-economically deprived areas [3, 4]. These communities tend to have more complex patients reflected in a higher prevalence of lower social-economic status, lower incomes (and dependency), low self-reliance, low self-reliance, limited social cohesion, more chronic diseases and multimorbidity with a high demand for care [5-8]. Besides, patients attend consultations more often with (more than one) non-medical complaints of a varying psychological or social nature which are frequently hidden as medical complaint, and thus difficult and time-consuming to explore [9]. In these patients repeated visits and unsolved needs are very common [10, 11].

A much debated question is whether prolonged consultation time could benefit primary care. Current evidence is inconclusive [12]. Recent literature has emerged that offers contradictory findings about prolonged consultation time as it could result in less medicalisation and referrals [13, 14], but also results in less accessibility of medical care in the population most in need for it, defined as the law of inverse care [15, 16]. It has been proved that prolonged consultation time results in reduced GPs' stress and enables professionals to offer more anticipatory and coordinated care [17]. Unfortunately, previous studies have not dealt with deprived communities, or had very specific patient populations [18, 19]. Moreover, the previous studies showed methodological weaknesses [12, 20]. There is little published data on the effect of prolonged consultation time in socio-economically deprived areas [3, 18], despite its potentially beneficial effect as shown by Mercer and colleagues [21].

Prolonged consultation time could contribute to a better understanding and exploring of the reasons for encounter and contextual background and thus better helping patients, especially those with complex needs. Therefore it could enhance high quality patient-centred care in socio-economically deprived areas. With this goal in mind, UFA¹, the organisation for GPs working in deprived areas in the Dutch cities of Utrecht and Amersfoort started a pilot in 2017 in which general practitioners working in deprived areas can get financial reimbursement for occasional 'one-hour consultations'.

¹ UFA: Utrechts Fonds Achterstandswijken

In order to be reimbursed GPs have to fill out an (anonymized) form about reasons and goals for this prolonged conversation with a patient.

This paper analyses these forms as well as the experiences of GPs that made use of this 'one-hour consultation' arrangement. Main research questions were: what are the characteristics of patients involved, how is the prolonged consultation implemented in practice and what are according to the GPs the effects of this intervention?

Key-words: prolonged consultation time, primary care, socio-economically deprived areas

Methods

Setting and population

This explorative, mixed-methods study is performed in General Practice in The Netherlands.

Participants are general practitioners in the Dutch 4th largest city of Utrecht (343.038 inhabitants²) and in Amersfoort (154.337 inhabitants²) working in socio-economically deprived areas (SEDA) [22]. SEDA are defined by Netherlands institute for health services research (NIVEL), based on environmental address density, the percentage of non-active or non-students, the percentage of non-Western ethnic minorities and the percentage of low-income residents [7]. The GPs used the 'one-hour consultation': a prolonged consultation time, up to one hour, as an explorative intervention. The general practitioner decided when and with whom to apply the intervention.

For the quantitative part data were extracted from all (anonymous) forms GPs filled out for each patient with whom they choose to have a prolonged consultation.

For the qualitative part, the 18 general practitioners involved were contacted by the chairman of the UFA through a letter with information on the study and with the request to agree on being interviewed about their experiences. Thereafter the researcher contacted the practices, by email and telephone. Interviews were performed with GPs striving for variation with regards to years of experience, gender, practice location and amount of patients included in the pilot. Inclusion went on until theoretical data saturation was reached. GPs were thanked and got reimbursed (by the UFA) for their time and effort participating in the interviews.

Data collection

The data for quantitative analysis was extracted from the forms that the UFA developed for this intervention and was collected from the start on 07-04-2017 until 31-05-2018. This data was provided in Excel by the UFA to the researcher.

² : Numbers of total population 2017

To get more in-depth information on the characteristics of the patients eligible for this intervention, a questionnaire was designed to gather more information about the GPs and patients in addition to the information provided for in the forms. This questionnaire was reviewed by two GPs and the chairman of UFA, and contained a total of 17 questions about the GP and about patient characteristics and background. The questionnaire consisted of multiple choice questions and descriptive scales. Each GP interviewed was asked to discuss in-depth two of his included patients, one successful and one unsuccessful case.

Qualitative data on the implementation and on the effect of the consultations were collected by individual semi-structured in-depth interviews conducted by the researcher. A topic list was designed and reviewed by the supervisor. The interviews were held between May 2018 and July 2018. Prior to the interviews the GPs were informed that the overall objective of the research was to explore the experiences with prolonged consultation at their practice; (1) how it was implemented in their practice (2) to find out what is gained by using the intervention. Confidentially agreement and informed consent, including permission for recording on a digital audio recorder, were obtained.

Data analysis

For quantitative analysis descriptive data were generated for the whole patient group using SPSS, version 22. Age groups were calculated based on year of birth.

The qualitative interviews were recorded and transcribed verbatim. Following transcription, data were analyzed by applying an open encoding technique following the principles of thematic analysis using Atlas.ti, version 8. Through analyzing, broad themes were identified first and then broken down into sub-themes [23, 24]. Memoing was used to keep note of how themes were derived. To ensure inter-rater reliability and minimizing researcher bias, two interviews were separately coded by the researcher and supervisor. Comparison took place and any discrepancies were resolved by discussion, until consensus was reached.

Results

Quantitative results

Patient characteristics

Nine GP practices made use of the one hour consultations, which represented a total of 18 GPs. These GPs reported a total of 79 prolonged consultations with 78 different patients (1 patient had 2 consultations). Median preparation took 15 minutes. At 22% of the consultations two or more 'healthcare' professionals were present (multidisciplinary consultations). Patient characteristics are depicted in table 1. 54% (43/79) of the consultations were with elderly above 65 years (with a range from 11 to 98 years). More than one-third of the consultations were held with the very old (age above 80).

The most common reason for GPs using prolonged consultation was: complex patients. The main physical and psychological problems were pain and anxiety, respectively. 16% of the group had medically unexplained symptoms. 15% (12/79) of patients had a migration background. In the total group the effects of these consultations, as described by the GPs, were gaining overview (27%), earning trust (20)%, understanding of situation (15%), being updated (13%), building relationship (8%), improving coordinated care (8%), proper referral (6%) and time for explanation (5%). Other effects brought up were: prevent referral, decrease in medication, clarifying roles, prevention of crisis and having time.

In-depth information about patient characteristics and background was gathered about 14 patients (see table 1 & 2). Goals and achievements of these 14 one-hour consultations are shown in table 3. For elaboration see appendix table 6.

Table 1:
Patient characteristics all patients and fourteen, in-depth patients

Characteristics	N = 79	N = 14
Gender		
Female	42	11
Male	16	3
Unknown	21	-
Age groups		
<30	9	1
30-65	27	9
65-80	13	4
80<	30	-
Migrant background		
No	65	8
Yes	14	6
Language barrier	6	4
Reason		
New patient	5	0
Frequent	8	1
Out of view	6	3
Old age	12	1
Complex	19	6
Other	-	4
Physical problems		
Cardiovascular	15	6
COPD / Asthma	2	2
DM*	9	4
Pain	23	3
Arthrosis	1	0
Cancer	6	1
None	3	1
Psychiatric problems		
Depression	8	4
Anhedonia	8	-
Psychosis	2	1
Insomnia	4	1
Anxiety	13	4
PTSD ^o	7	3
Dementia	3	1
Addiction	3	1
Other	13	8
None	13	3
MUS^y	16	5
Work		
Yes	-	2
Retired	41	4
Unemployed	2	4
Incapacity to work	6	3
Not obligated	2	1
Problems social support		
Social isolation	8	-
Relationship partner	3	4
Relationship children	1	7
Relationship parents	2	4
Relationship professional	2	-
Children with problems	3	1
Informal caregiver	-	3
Social functioning		
Financial problems / debts	6	5
Criminality / justice	2	1
Dole-dependent	2	-
Cultural problems	-	4
Loneliness	4	9

Table 2:
Patients characteristics of fourteen, in-depth patients

Characteristics	N=14
Estimated intelligence	
<90	4
90-109	6
110<	4
Education	
Special education	1
Primary school	3
Secondary school	2
IVE*	2
Unknown	6
Number of medication	
0	1
1	1
2-3	5
4-6	3
7-9	3
10	1
Other professionals involved	
none	1
1	3
2	5
3<	5

*: intermediate vocational education

*: diabetes mellitus

^o: post-traumatic stress disorder

^y: medically unexplained symptoms

Table 3:

Goals and achievements in-depth patients

Patient	Age group	Gender (M/F)	Goal(s)	Achievement(s)
1	31-40	F	- Assessment of overload complaints, because during overload diseases aggravate. - Raise awareness of disease to accept care	- Raised awareness with the result of accepting additional care - Less frequently aggravation of disease
2	71-80	F	- To take time for giving information about euthanasia to a patient whom was contradictory about her wishes	- Reconsideration patient and family - Patient went to nursing home instead of euthanasia
3	61-70	F	- Maintain contact and keep a connection with a patient who had a totally different understanding about illness	- GP gained trust of patient - Interchanging thoughts about illness - In control of situation due to improved ability managing ups and downs of patient
4	51-60	F	- Create an overview of all complaints in every domain - Clarification of patients expectations of GP - Assessment which care patient requires	- Raised awareness of disease with the result of understanding the connection between physical and mental complaints - Became clear what the GP could offer patient and what the expectations were to each other - Appropriate referral to psychologist
5	51-60	F	- To earn trust	- Shifted care to proper professional - Shorter follow up consultations with less issues
6	51-60	F	- Create an overview of all complaints	- Created overview of patient and file - Shifted care to proper professional - Clear arrangement when having complaints - Shorter follow-up consultations
7	71-80	F	- Create an overview of situation - Understanding of context - Reducing frequency consultations	- Less frequent consultations
8	31-40	M	- To involve more and suitable care	- Appropriate referral to medical specialist (only patient didn't went)
9	11-20	M	- Initiated by other professional, presumably to give GP insight into situation	- Appreciation on work of other professionals - GP gained insight in dispute patient and other professionals
10	61-70	F	- To gain insight in file and lack of compliance	- Gained insight in lack of compliance (due to psychosis) - Attempting new intervention for compliance (involving home care)
11	71-80	F	- To get in control of troubled situation consisting of complaints, miscommunication and disputes	- To observe relationship patient and family - Temporarily feeling of bringing GP closer to the patient - Clear arrangement about complaints - Less frequent consultations
12	51-60	F	- To coordinate care between professionals - Improve cooperation between professionals - Overview of complaints and gain insight in reason of frequent consultations	- Enabled appropriate referral and care - Patient gained insight in Dutch health care - Patient gained awareness in diseases - Less frequent consultations
13	51-60	M	- Implementation of multidisciplinary meeting of a patient with very low self-reliance	- Enabled appropriate care - All involved gained insight in each other tasks - Gained new information about patient context with result of appropriate referral - Short lines of communication between professionals
14	31-40	F	- To enable appropriate care on each domain with this avoider of care - To change disease management - To get all professional on the same page	- Gained better understanding of patient - Involved practice nurse mental care

Qualitative results: experiences of participating GPs

A total of nine GPs, distributed over six practices, were interviewed (see table 4 for characteristics), after which theoretical data saturation was reached. The majority were middle-aged female doctors with more than 5 years experience working in a deprived area.

Table 4:
Overview interviewed general practitioners characteristics

GP	Gender (M/F)	Age group	Years of working experience SEDA*	Place of work	Consultations
P1GP1	F	40-49	8	Utrecht	37
P2GP1	F	30-39	3,5	Utrecht	4
P2GP2	F	40-49	11	Utrecht	1
P3GP1	M	50-59	16	Utrecht	7
P4GP1	F	30-39	10	Utrecht	5
P4GP2	M	30-39	7	Utrecht	1
P5GP1	F	30-39	9	Utrecht	3
P6GP1	F	40-49	10	Amersfoort	1
P7GP1	F	40-49	6	Utrecht	3

*SEDA: socio-economically deprived areas

General positive attitude regarding the prolonged consultation

Most reactions of GPs were positive when they were informed by the UFA about the possibility of being reimbursed for a one hour consultation:

"I had something like, nice, because then I have the opportunity to possibly arrange it well for a couple of patients that I know, being with several people, or to figure things out". (P4GP1)

Choosing the intervention

Instead of general motivation, GPs reported particularly patient specific reasons for choosing to apply the prolonged consultation. Frequent reasons mentioned were: "feeling stuck in a situation", "wanting to get overview of all complaints", "wanting to gain more trust" and "wanting to promote disease awareness in the patient". Also problems with other involved healthcare professionals were often mentioned to contribute to their choice.

A general characteristic seemed that these patients tend to drive the GPs into despair:

[Interviewer] and how did you decide with whom you wanted prolonged consultation?

[GP] well, if I saw the file and I panicked, then I thought about it, I thought jeez.

[Interviewer] panic, because?

[GP] because the file is too thick and the patient had medically unexplained complaints. Just someone who comes frequently, of which I think every time, 'what should I do with you' (P2GP1)

"I really use it when I notice that I am in a vicious circle all the time, and then I think, but 'now it should just has to be different'" (P4GP1)

For most of the one hour consultations the GPs had set a specific goal, for instance making the patient understand the nature of his medically unexplained symptoms.

"That I had that goal, that we discussed that I wanted to make a start with explaining the concept; that you get physical complaints when having a lot of stressors and I believe that it is successful, but I also noticed that it is really difficult". (P2GP1)

Two GPs mentioned, the ultimate goal for patients is "manage themselves" and "where possible, have their own control", if patients' abilities would allow it. Achieving this goal is a process in which one-hour consultations could contribute to increasing self-management.

One GP discussed the goal of the one hour consultation on forehand with the patient:

"Maybe with some, if you indicate in advance what the goals are, so that they also start thinking about what they want. [...] that someone can consciously think about that before you start the consultation". (P7GP1)

The one hour consultations were not only inspired by patient specific reasons, also the financial aspect was mentioned by half of the GPs who liked to receive financial compensation for the actual time they spent with the patient, rather than only for a maximum of 20 minutes. The GPs mentioned that this complexity in patients can hardly be managed in the usual timeslots, so before the one-hour consultation became available, they already often spent an hour with these patients without financial compensation. They 'just' want to get reimbursed for their time, it doesn't matter how it should be called, "if it is called hour-talk, so be it".

"look and the beauty is now of course, now we can get reimbursement invoice [...] Now only the agenda time is a problem" (P4GP1)

Patients elected for the one hour consultation

Patients in deprived communities often are described as complex. At first, this complexity doesn't always predominate and patients have hidden questions. However, a general characteristic of the patients involved in the one-hour consultation was, according to most GPs, that they are very vulnerable, with psychosocial problems.

"sometimes such vulnerable people with so much complexity of problems and across different domains [...] so they are really, very vulnerable people who have illiteracy, or are mentally handicapped, or both, and often also with many different problems on multiple domains, so: unemployment, poverty, debts, disputes. Really different problems than just having medical. So I think that is mainly the club". (P4GP1)

So, complexity is defined as a combination of physical and psychological problems intertwined with and influenced by social problems (financial debts, housing problems, relationship problems and parenting problems) and sometimes complicated by cultural or language barriers.

"to explain your role as doctor, because people expect that you will solve everything [...] that takes time, especially with language or cultural barrier, to clarify 'what do you expect from me?' and 'what can you expect from me?' (P5GP1)

Besides complex or , vulnerable patients, also elderly and new patients were often chosen for the intervention.

On the contrary, some GPs at first did not have a clue which patients or what specific problems they should choose for this intervention. One GP discovered that she did consultations with "unique patients that were not representative" for her patient population.

Organisation of the consultations: preference for multidisciplinary consultations

Frequently, the GPs invited other professionals to one-hour consultations that thus became multidisciplinary consultations. They explained their choice by pointing out that nowadays, the GP is expected to cover also problems in the social domain. However, they felt they don't have sufficient knowledge, skills and time to fully care for all domains. Therefore they thought a multidisciplinary consultation is to be required to cover all the domains of the patients' problems. The concept of multidisciplinary consultations was not new to most GPs. However, the thoughts about the multidisciplinary one hour consultations were different.

“Because they all have their own story, opinions, ideas, or want to know things. It is nice again, because [...] during the conversation she sees [healthcare professional] what my opinion is, what I want and what my ideas are, and I see what she thinks. But it is above all, and that is real, and that really works, that everyone is on the same page. This is the problem and this is the way to tackle that problem, which is very nice.” (P3GP1)

Almost half of the GPs mentioned multiple disciplines attending as an important asset. Mentioned pros and cons are depicted in table 5.

*Table 5:
Mentioned advantage and disadvantage of multidisciplinary consultation*

Advantages	Disadvantages
Clarifying roles	Opposite opinions
Coordination of expectations	Everyone has own agenda
Ensure that everyone is on the same page	
Short communication lines	
Insight into expertise other professional	
Task division	

Practical issues concerning multidisciplinary implementation

One practical obstacle mentioned for having multidisciplinary consultations were difficulty in planning, because it is time-consuming and quite a task to find time in schedules of all professionals. Secondly, an issue was inefficiency of the consultation, because not every domain has relevance for every professional present.

Organisation of consultations: using 4D model

In the one-hour consultations most GPs used the 4D model [8], as they were also obligated to fill out the forms’ design. This model is developed in Utrecht and helped them “getting insight what problems are present in which domain” (physical, psychological, social functioning and social support), “prioritizing existing problems”, “gathering new information” and “identifying association between problems on different domains”.

“look, its part of, I think [...] as an aid to explain and clarify things, also for the patient her/himself. It is a very simple A4 paper size which patients themselves also fill out on how they are doing. Actually you use the biopsychosocial model. It is actually implementation of the biopsychosocial model with identifying social problems”. (P5GP1)

Most importantly GPs said that now they consciously deal with the four domains, which differ from regular consultations.

“Yes, well, the main difference is that I can discuss the situation much more extensively and that I very explicitly touch those four domains” (P2GP1)

Not all GPs were using this as inexperience was part of the reason. In addition, using the model can also counteract.

“With the other person I think it was actually too complicated to show that, but maybe in another case., I have not done it yet”. (P2GP2)

Impediments to overcome

During the interviews it has emerged that lack of knowledge about the intervention, limited timeslots available and busy schedules were obstacles to implement the one-hour consultations. Regarding the obstacles concerning practice organisation, opinions were mixed. While two GPs said that the practice assistants were not amused by planning these one-hour consultations (because it was difficult to fit in their timeslots), the GP with the most one-hour consultations told this was not a problem.

Frequency in doing one-hour consultations differed between the GPs. Limited use can be explained due to not knowing, or only recent knowledge of the possibility. Other said that it was unclear what the proceedings were, how organisation and how reimbursement were managed. As for other GPs, they forgot it, because of their busy schedules. Two GPs from the same practice mentioned that the yield would be larger when you just do it more often.

“We just didn’t start this very long ago. [...] It is mainly inexperience and unfamiliarity that we have not done that much more in practice”. (P6GP1)

Time, time ,time. Time is the most important obstacle in implementing prolonged consultations. Seven participating GPs acknowledged they were too busy to implement more one hour consultations due to their busy schedules. An hour consultation means that five regular patients can’t be seen. As one GP reacts:

“I know yes, I just don’t know when to do that”. (P2GP1)

Aside from finding time in their working schedules, also preparation time was an obstacle to overcome. Thoroughly reading and (re)searching the file (especially extended files of elderly and with multimorbidity) took a lot of time. On the other side, others did not see this as a hurdle. They experienced the preparation as very helpful as they gained more insight and rearranged the file as they now got a broader view. Furthermore, some said it wouldn't take extra time, because the patients involved were frequent attendees anyhow.

"if you prepare for on ordinary consultation, it is much more superficial. Then I only look at the subject where someone comes for. [...] While for that one-hour consultation I just try to look at all the subjects, so that takes more time. But it is useful, so a very good reason to do that, so that's very nice". (P2GP1)

Almost all GPs mentioned that language barriers are common during consultation, but only two of them mentioned this as an obstacle for the one-hour consultation. Another GP, on the contrary, mentioned it as a motivation for one-hour consultation.

Others obstacles to implement the one-hour consultations suggested were the fear that patients would get demanding or get used to it, and were expecting another hour, and the limited attention span of some patients.

Another hurdle is the re-active way how GPs are used to work:

"Relatively we have a reactive job, in this sense: patients call and want to be seen and we schedule an appointment". (P5GP1)

Although time and occupied schedules were mentioned by a majority, also solutions to these obstacles were proposed. Five GPs suggested having these consultations when there were multiple GPs working. Another suggestion is to plan it way beforehand.

"well yes, if we are with several doctors then it will work. And coincidentally yesterday I was alone, so than it doesn't work. You know, but if you work then sometimes you are working with 3 other GPs and they can do emergencies, so then it's easier to plan. But you have to plan it really ahead, you know, that it is well in advance" (P7GP1)

Three GPs came with another idea of hiring a locum GP who could do the regular consultations so the GP could do a couple – half a day - prolonged consultations.

Another barrier was the complicated way to apply for reimbursement. Three GPs mentioned that they experienced problems with it. Summarizing it in "cumbersome justification which takes of course time again".

Effect of one-hour consultations

The GPs mentioned positive outcomes of the consultations for the patient, the practice and themselves. An important positive effect of the one-hour consultation according to the GPs resulted from the time and space available for the patients to tell their whole story.

"You, well, there is more space. [...] normally in a consultation you are almost afraid to ask 'is there anything else?', because then you think 'oh, then I get a whole..' and during this one-hour consultation you want to know everything, so you can also see what is relevant and what is important for now" . (P1GP1)

This made the patient felt taken seriously and the GP felt they got more overview and felt more in control. Another positive effect seen was the improvement of disease awareness in the patient, getting more insight in the association between physical and mental health problems and that social problems interfere and maintain problems on other domains.

"at first they [patients] always think 'oh, why is this necessary?' and at the end they are always happy. Then they think, 'yes', and then they put that link themselves of 'hey', well to come back to that son in prison 'oh, yes my son is in prison, actually since that time I have suffered a lot of headache' .(P1GP1)

Patients also got more self-reliance as they were stimulated to come up with their own thoughts and solutions.

"To ask in-depth questions and also trying, giving space for the patient to come up with ideas, thoughts, solutions and plans. That you will explain less of what I think we should do now or what we will do. So that your patient is really involved in that. That you do not decide about patients' fortune". (P5GP1)

Three GPs stated that frequent attendees returned less often to their practice after the one-hour consultation resulting in a decrease in health care consumption. Besides, the follow up consultations took less time than before and were more efficient. This decrease of health care consumption was partly explained by the fact that patients, after one hour consultation, were more often referred to appropriate services of other professionals.

Also when there was no decrease in health care consumption, GPs felt less burdened:

“While with others I am still intensively busy, but in my opinion I am more goal oriented and also have more clear what my role is in the whole and also that the patient knows about it”. (P4GP1)

As for the GPs an important positive effect was gaining understanding and appreciation from the patient. Moreover, two-third of the GPs said they used the consultation to elucidate, compare and readjust the expectations of the patient with his own. Having more time was especially beneficial in cases complicated by language and cultural barriers.

For the GP her/himself the one-hour consultation allowed him to be more relaxed and lean back.

“well you are just a little bit more like it’s not that 10 minutes, so you are all more relaxed. There was no coffee, but that could have been done”. (P2GP2)

Other positive effects mentioned were the file getting rearranged, getting more information about past complaints and to be updated on the situation, all leading to more overview and more insight in the context of the patient as well as in the patients’ network. This information was helpful to understand non-compliance and to target care more to the priorities and possibilities of the patient.

“Sometimes they [patients] say ‘well its very nice all this advice, but I can’t afford fresh fruit and vegetables’, or ‘yes, you send me to the physiotherapist, but I never went, because I can’t pay that. [...] You really get to be surprised at times”. (P4GP1)

“yes, yes, because that’s where I have time, so I can also see that coherence much more. [...] for example of a lady with knee complaints, a lot of knee complaints, more actually than I thought it troubled her. [...] She was also very depressed, and then I said, ‘go outside’ you know, ‘just get moving’. And then she said ‘yes I want to, but that knee, that knee’ [...] then the association is getting clearer. Like, you know that depression is still there and we want you to get better by going outside to see more people, but you have a lot of complaints of that knee. We have to do something about that knee, if possible. [...] maybe we should look if you can go outside with another means of transport. In the busy regular consultations I have no space at all to think about that and to make this association” (P4GP1)

Furthermore, having more time for a consultation stimulated a helicopter view attitude, being more curious, making a long term plan and looking more carefully.

“Because someone makes an appointment for a certain problem what they want to have solved at that moment, so you only go into that problem [...] I also think that during that consultation you will

be much more looking from above, 'ok, what is important for the longer term' and not putting out fires at that moment [...]What has priority?' (P4GP1)

The multidisciplinary consultations were experienced as very effective and beneficial and resulted in more adequate referrals and better task division.

"Well the complexity of the problems is not gone with that hourly consultation. What really helped me in this, as a health care professional, is that the tasks and roles are well distributed and that helped me a lot". (P4GP1)

I think it also has to do with our role as a GP, what we see as our position as a GP and our role in general... [...] what do we really expect from each other and what can we expect, because sometimes patients are just bounced back and forth and eventually they come at their GP again, while that may not be the right place for something. That you can improve this cooperation. The yield is also much larger, so that something don't get bogged down [...] that you are looking for connections with each other around that patient [...] there is still a lot to be gained that can increase efficiency and make people feel better faster". (P5GP1)

There were no negative effects mentioned. On the contrary, the one hour consultation was overall seen as very positive and as an example of how General Practice should work:

"I think that this way of working is necessary to [...] that money is needed for space, time is needed, to have this kind of consultations in a general practice and that this can be paid for, that good care can be provided, appropriate care. Because, otherwise you go back to the old principle of 10 minutes per patient indeed and a high number of health care consumption and a high amount of exhausted GPs or patients who don't feel understood. Yes, and then you are back to square one". (P5GP1)

Discussion

Summary of findings and comparison with other studies

GPs in socio-economically deprived areas in a large city in the Netherlands who held one-hour consultations with selected 'complex' patients, which were reimbursed by a special fund, think these prolonged consultations are very valuable. In a period of one year, 18 GPs held 79 one-hour consultations with 78 patients. These patients were characterized by being seen as vulnerable, with complex physical as well as psycho-social problems and limited self-management. The GPs prepared the consultations, invited often other professionals to attend and structured the consultations in most cases by using the 4D-model that helps to assess the physical, mental health, social functioning and social support.

Although the implementation sometimes was challenging due to their limited time available, the GPs experienced many positive, and no negative, effects. The most important positive experience was these consultations provided them with time and mental space to let the patient tell his whole story as well as his expectations of the GP and his own views on possible solutions. On the one hand this resulted in more overview of the GP of all the patients' problems as well as of his context and networks, enabling more effective referrals and appropriate, coordinated care. On the other hand the GPs experienced more trust on the side of the patient and a greater self-reliance, resulting in fewer consultations, or in more effective and satisfying consultations.

Contrary to our positive experiences, previous studies evaluating prolonged consultation observed inconsistencies whether it enhances high-quality patient-centered primary care and if it increases patient satisfaction [12]. From our study it seems that 'better', appropriate care is provided from GPs experiences. This could be explained by using more time, one-hour consultation, in a different population, in one where it is most needed, and thus resulting in a greater effect. However, this was not found by Chan and colleagues using multidisciplinary prolonged consultation in SEDA, possibly due to methodological weaknesses [18, 19]. As seen by Jung and colleagues[14], more consultation time available results in less referrals. As comparable to this study, although not measured, GPs think they referred less, but more importantly, felt they referred to appropriate services of other professionals. The experiences resonate with another study, that from GPs viewpoint, time was found useful to establish relationship and coping better with the patient [3]. Our experiences seem to be promising and findings correspond with patients desires and values how to carry out primary care by physicians [25, 26]. Besides, time has an important role in multidisciplinary coordinated care [27] and perceived quality care [28]. In addition, Mercer (2016) showed a potential effect in protecting quality of life and being cost-effective using prolonged consultation as part of whole-

system approach in a comparable population as they suggest that increasing consultation length may be crucial. Aside from patients' benefits, prolonged consultation helps doctors to remind of their core values and let them keep in mind the fundamental reasons why they became general practitioner as they are now [1, 29, 30].

Strength

As far as known, this is one of the few studies that elucidate views and experiences of GPs working in SEDA on prolonged consultation.

Limitations

We acknowledge that respondents could give socially desirable answers when bearing in mind that they got financially compensated for their time and for the hour consultation.

Another shortcoming of this study design is that we only looked at the experiences of the GPs. Of course, the experiences of the patients involved would be at least as important.

Implications for future research and clinical practice

Currently, in this study only GPs' experiences are revealed, but other research questions remain. To develop a full view of one-hour consultation, additional studies will be needed that elucidate experiences of patients whom had one-hour consultation, mainly investigating their views and thoughts; did they indeed receive the appropriate care the GP thinks? Did they feel helped and understood? Are the previously established goals reached? Do they have better quality of life and improved self-reliance? Moreover, further investigation needs to focus on long term outcomes and changes in frequency of consultation, referrals, prescribing medicine behavior and accessibility.

Because of the positive experiences, the implementation and reimbursement of one-hour consultations should be extended to other socio-economically deprived areas in the Netherlands. The insights gained from this study may be of assistance to the further implementation of the one-hour consultations and to the discussion of reimbursement possibilities. One GP attempts implementation by hiring a locum GP which can perform regular consultations. We await the experiences with interest.

Conclusion

GPs views on one-hour consultation are positive and promising. There are still impediments to overcome. If used wisely, for specific patients, one-hour consultations can improve patient-centered, integrated appropriate primary care as well as the satisfaction and well being of the GPs involved.

References

1. Genootschap, N.H., *NHG-standpunt Kernwaarden huisartsgeneeskunde generalistisch, persoonsgericht en continu*. Utrecht: NHG, 2011.
2. LHV, N., *Toekomstvisie huisartsenzorg 2022*. Modernisering naar een menselijke maat: Huisartsenzorg in, 2012. **2022**.
3. O'Brien, R., et al., *An 'endless struggle': a qualitative study of general practitioners' and practice nurses' experiences of managing multimorbidity in socio-economically deprived areas of Scotland*. *Chronic Illn*, 2011. **7**(1): p. 45-59.
4. Carlisle, R., A.J. Avery, and P. Marsh, *Primary care teams work harder in deprived areas*. *J Public Health Med*, 2002. **24**(1): p. 43-8.
5. Westert, G.P., et al., *Monitoring health inequalities through general practice: the Second Dutch National Survey of General Practice*. *Eur J Public Health*, 2005. **15**(1): p. 59-65.
6. Nielen, M., et al., *Vooronderzoek verbetering kwaliteit huisartsenzorg in achterstandsgebieden grote steden*. 2007: NIVEL Utrecht.
7. Devillé, W.L.J.M. and T.A. Wieggers, *Herijking stedelijke achterstandsgebieden 2013*. 2012: NIVEL.
8. Leemrijse, C., D.d. Bakker, and T. Schoenmakers, *Overvecht Gezond! Theoretische onderbouwing van de integrale aanpak'krachtige basiszorg'in de Utrechtse wijk Overvecht*. 2016.
9. Kadam, U., *Redesigning the general practice consultation to improve care for patients with multimorbidity*. *BMJ*, 2012. **345**: p. e6202.
10. Morrell, D., et al., *The " five minute " consultation: effect of time constraint on clinical content and patient satisfaction*. *Br Med J (Clin Res Ed)*, 1986. **292**(6524): p. 870-873.
11. Ridsdale, L., et al., *Study of the effect of time availability on the consultation*. *JR Coll Gen Pract*, 1989. **39**(329): p. 488-491.
12. Wilson, A.D., et al., *Interventions to increase or decrease the length of primary care physicians' consultation*. *Cochrane Database Syst Rev*, 2016(8): p. CD003540.
13. Wilson, A. and S. Childs, *The relationship between consultation length, process and outcomes in general practice: a systematic review*. *Br J Gen Pract*, 2002. **52**(485): p. 1012-20.
14. Jung, H.P., et al., *Meer tijd voor patiënten, minder verwijzingen*. *Huisarts en wetenschap*, 2018. **61**(3): p. 39-41.
15. Watt, G., *The inverse care law today*. *The Lancet*, 2002. **360**(9328): p. 252-254.
16. Mercer, S.W., et al., *Multimorbidity and the inverse care law in primary care*. *BMJ*, 2012. **344**: p. e4152.
17. Mercer, S.W., et al., *More time for complex consultations in a high-deprivation practice is associated with increased patient enablement*. *Br J Gen Pract*, 2007. **57**(545): p. 960-6.
18. Chan, W.S., et al., *A multidisciplinary primary care team consultation in a socio-economically deprived community: an exploratory randomised controlled trial*. *BMC Health Serv Res*, 2011. **11**: p. 15.
19. Whitford, D.L. and W.S. Chan, *A randomised controlled trial of a lengthened and multi-disciplinary consultation model in a socially deprived community: a study protocol*. *BMC Fam Pract*, 2007. **8**: p. 38.
20. Wilson, A.D. and S. Childs, *Effects of interventions aimed at changing the length of primary care physicians' consultation*. *Cochrane Database Syst Rev*, 2006(1): p. CD003540.
21. Mercer, S.W., et al., *The CARE Plus study – a whole-system intervention to improve quality of life of primary care patients with multimorbidity in areas of high socioeconomic deprivation: exploratory cluster randomised controlled trial and cost-utility analysis*. *BMC Medicine*, 2016. **14**(1): p. 88.
22. voor de Statistiek, C.B., *Bevolking; ontwikkeling in gemeenten met 100 000 of meer inwoners*. 2017.

23. Braun, V. and V. Clarke, *Using thematic analysis in psychology*. Qualitative research in psychology, 2006. **3**(2): p. 77-101.
24. Clarke, V. and V. Braun, *Thematic Analysis*, in *Encyclopedia of Quality of Life and Well-Being Research*, A.C. Michalos, Editor. 2014, Springer Netherlands: Dordrecht. p. 6626-6628.
25. Kerse, N., *Physician-Patient Relationship and Medication Compliance: A Primary Care Investigation*. The Annals of Family Medicine, 2004. **2**(5): p. 455-461.
26. Main, D.S., et al., *Patient perspectives on the doctor of the future*. FAMILY MEDICINE-KANSAS CITY-, 2002. **34**(4): p. 251-257.
27. Schepman, S., et al., *The common characteristics and outcomes of multidisciplinary collaboration in primary health care: a systematic literature review*. International journal of integrated care, 2015. **15**(2).
28. Mercer, S.W., P.G. Cawston, and A.P. Bikker, *Quality in general practice consultations; a qualitative study of the views of patients living in an area of high socio-economic deprivation in Scotland*. BMC Fam Pract, 2007. **8**: p. 22.
29. Europe, W., *The European definition of general practice/family medicine*. Barcelona: WONCA Europe, 2002.
30. Howie, J., D. Heaney, and M. Maxwell, *Quality, core values and the general practice consultation: issues of definition, measurement and delivery*. Family Practice, 2004. **21**(4): p. 458-468.

Appendix: elaboration patient characteristics

Table 6:
Background information on fourteen in-depth patients

Patient	Age group	Gender (M/F)	Highest education	Estimated intelligence	Immigrant	Work	Chronic physical diseases	Psychiatric disease	SSRD	Number of medication	Social problems	Support system problems	Professionals involved
1	31-40	F	Unknown	Below average (80-89)	Native	Incapacity to work	Eczema Factor V Leiden Multiple sclerosis	-	-	1	Financial (fairly)	Relationship partner (reasonable) Relationship children (little) Relationship parents (little) Informal caregiver (reasonable)	Domestic help Medical specialist (neurologist)
2	71-80	F	Intermediate vocational education	Above average (110 or higher)	Native	Retired	Breastcancer Cardiovascular	Dementia Depression	-	6	Loneliness (little)	-	Domestic help Home care PN-elderly
3	61-70	F	Secondary school	Above average (110 or higher)	Native	Retired	Chronic pain Obesity	Anxiety disorder PTSD	-	2	Loneliness (reasonable)	Relationship children (much)	-
4	51-60	F	Unknown	Average (90-109)	1st	Unemployed	Fibromyalgia Gastric complaints	Anxiety disorder Depression	-	3	Financial (reasonable) Language (reasonable) Loneliness (reasonable)	Relationship children (reasonable)	Physiotherapist Psychologist
5	51-60	F	Secondary school	Average (90-109)	Native	Working	COPD	Dependent personality disorder	Pain MSKS	2	Financial (much)	Relationship partner (much)	PN somatic Psychiatrist
6	51-60	F	Unknown	Average (90-109)	2nd	Unemployed	Diabetes mellitus Ménière's disease	Anxiety disorder	Palpitations	5	Loneliness (reasonable) Cultural (reasonable)	Relationship parents (reasonable) Relationship partner (reasonable) Children with problems (reasonable) Relationship parents (little)	Psychiatrist Psychiatrist
7	71-80	F	Intermediate vocational education	Above average (110 or higher)	1st	Retired	BPPV Cardiovascular CKD	-	Dizziness Pain MSKS	10	Cultural (little) Loneliness (reasonable)	Relationship children (little)	Medical specialist Psychiatrist
8	31-40	M	Primary school	Lower intelligence (70-79)	Native	Working	Fibromyalgia Chronic pain	Addiction	-	3	Financial (fairly) Criminality (much) Language (little) Cultural (much)	Relationship partner (fairly) Relationship children (reasonable)	PN mental care
9	11-20	M	Special education	Mental retardation (50-69)	3rd	Not obligated to work (underaged)	-	ADHD Autism	-	0	-	-	District team Pedagogical worker
10	61-70	F	Primary school	Below average (80-89)	1st	Incapacity to work	CHF CKD DM	Psychosis Schizophrenia	Dizziness Fatigue Back pain	9	Language (much) Cultural (much)	Informal caregiver (much)	Home health care Nurse DM PN mental care
11	71-80	F	Unknown	Average (90-109)	Native	Retired	Cardiovascular COPD	-	-	7	Loneliness (fairly)	Relationship children (fairly)	Pulmonologist
12	51-60	F	Primary school	Average (90-109)	1st	Unemployed	Cardiovascular Diabetes mellitus	Depression Insomnia PTSD	Abdominal pain Headache Pain MSKS	4	Language (fairly) Cultural (fairly) Loneliness (reasonable)	Relationship children (fairly)	District team PN somatic PN mental care
13	51-60	M	Unknown	Average (90-109)	Native	Incapacity to work (army)	Amputation both legs Cardiovascular Chronic pain DM	Depression	-	7	Financial (much) Loneliness (little)	Relationship parents (little)	District team Nurse CVA Medical specialist Occupational therapist
14	31-40	F	Unknown	Above average (110 or higher)	Native	Unemployed	DM Morbid obesity	COE Personality disorder	-	2	Loneliness (little)	Childrens with problem (little) Informal caregiver (little)	District team Personal exercise trainer PN mental care