

***Lifestyle advice in UK Primary Care consultations: Doctors' use of conditional forms of advice***

Kathrina Connabeer\*

*\*Corresponding author at:* Birmingham City University, Curzon Building, Birmingham, UK, B4 7BD  
Kathrina.Connabeer@BCU.ac.uk

**Conflict of interest**

The author declares no conflict of interest.

## **Abstract**

**Objective:** To investigate how doctors deliver lifestyle advice to patients in ordinary general practice consultations.

**Method:** A secondary analysis of audio/video recorded primary care consultations between doctors and patients. Instances of lifestyle related talk were identified and analysed according to the methods of Conversation Analysis.

**Results:** The most frequently used format for delivering advice was found to be *if*-conditional forms. Conditional forms work to convey how advice is relevant to the individual's health circumstances 1) topicalising the problematic risk to the patient, 2) informing and warning the patient of reoccurring or future health risks, and 3) offering changes in lifestyle in addition to or as a replacement for medication.

**Conclusion:** The results show that doctors use *if*-conditional constructions to navigate anticipated or actual difficulties evidenced through misalignment in delivering lifestyle advice, by conveying the importance of the advice to the individual patient.

**Practice Implications:** Using *if*-conditional constructions when talking with patients regarding their problematic risk factors provides a technique enabling doctors to navigate the sensitivities associated with giving advice, whilst delivering personalised and preventative medicine.

## **Key words**

Lifestyle Risk Factors; advice-giving; doctor-patient communication; Primary Care; conversation analysis.

## **Funding**

This research was not funded.

## 1. Introduction

There is evidence that lifestyle behaviours such as alcohol consumption, diet, smoking, and weight contribute significantly to the global burden of lifestyle-related disease, accounting for 71% of mostly preventable deaths worldwide [1]. Whilst long-term use of medication is the most prominent and effective form of treatment for non-communicable diseases [2], it is increasingly clear that individuals could significantly improve their health and reduce risk through adjusting their lifestyle behaviours. Research has highlighted the effects of lifestyle risk factors on the overall health of the population and on the financial burden associated with chronic diseases worldwide [3, 4, 5]. As a result, there has in recent years been a shift in chronic disease management; health professionals have called upon health services to be more proactive, rather than reactive in the delivery of healthcare [3]. Prevention strategies have been promoted as a key priority across the UK's National Health Service (NHS), and for other healthcare services worldwide, suggesting that 'health systems should shift away from a curative medical model of healthcare that is reactive' and instead 'should emphasise prevention' [6]. Though the shift from reactive to proactive healthcare has been gradual, one principal strategy to have emerged is an emphasis on the role primary care doctors can play in advising patients about modifying their lifestyle behaviour(s).

Modifying lifestyle behaviours is key to the prevention, management and treatment of non-communicable disease and health problems [7]. General practice is the principal entry point to the UK's NHS's medical services [7, 8, 9, 10, 11], supporting the health of a large proportion of the population and promoting better health for all [6]. NHS primary care doctors (GPs) regard the delivery of lifestyle advice and counselling as a vital and obligatory part of their patient care [12]. Though research has demonstrated the health benefits of promoting lifestyle behaviour [13, 14, 15], little is known about how doctors actually deliver lifestyle advice to patients during the consultation. This article focuses on how doctors give lifestyle advice to patients in Primary Care general practice consultations.

Research on the interactions in which health care professionals give patients advice [16, 17, 18, 19, 20, 21, 21, 22, 23, 24, 25] has highlighted a number of themes coalescing around the sensitivities and difficulties associated with delivering advice to medical service recipients (patients, new mothers etc.). An initial theme concerns the sequential management of leading up to and delivering advice: Heritage and Sefi showed that Health Visitors approach giving advice to new mothers in a step by step manner by first making an enquiry that "serves to topicalize the issue for which advice is subsequently developed" [16, p.389]. A second, theme is the sensitivities associated with asymmetries of knowledge (knowledge

imbalances) and competence in initiating, delivering and responding to advice when advice-givers position themselves as more knowledgeable than the advice-recipient [16, 26, 27, 28]. A third theme is the tension between medical authority (including medical claims to 'know better' in decision-making), and patients' first-hand knowledge of their health condition and their rights concerning decisions about their medical treatment [29]. Related to which, the research literature suggests the potential risks of giving advice to an 'unprepared recipient', in the absence of any clear indication that the advice was warranted, necessary or wanted [16]. In this respect, it is notable that Bergen has shown that delivering advice as part of a treatment plan resulted in a higher rate of advice acceptance [23]. By contrast, presenting advice about changing a patient's lifestyle behaviour, as an alternative to other preferred treatments such as medication, has the potential to increase resistance [24, 30].

Previous studies indicate that other factors may contribute to the delicacy or sensitivity of giving advice. Seeking and responding to advice can be problematic by virtue of the implied admission of uncertainty [16]. Other factors are the social context in which advice is given, for instance whether advice was supplementary to the purpose of the consultation [16, 17, 18, 19, 22]; and the further implication that giving advice may signify the failure of further support (e.g. medication) [28, 31].

Whilst some of this research has shed light on the sensitivities and tensions involved when doctors deliver advice in *general* to patients [23, 25, 30], research has not previously been undertaken into how doctors deliver *lifestyle* advice, in particular. It is known there are distinctive sensibilities and difficulties when advising patients about changing their lifestyle habits (e.g. smoking, drinking alcohol, exercise). This paper reports research into how lifestyle advice, specifically, is delivered. It focuses on a form of delivery, *if*- conditional constructions, that is particularly suited to managing anticipated difficulties in reception, and which was found to be the most commonly used format in a corpus of naturally occurring primary care consultations in the UK.

## 2. Methods

Data: A secondary analysis was conducted of a corpus (n=300) of primary care consultations in the UK [32, 33]. Of these, 86 consultations were identified in which lifestyle or self-care were discussed. These involved 22 doctors (f=13, m=10) recorded (n=82 video, n=4 audio) in 12 medical centres, with 85 patients (f=51, m=34). The mean consultation length was 13:36 minutes (range 3:15 minutes to 34:9 minutes). Patients presented with a range of health conditions, including musculoskeletal, digestive,

psychological, urological, cardiovascular, male genital, female genital, pregnancy, endocrine/metabolic and nutritional problems [32].

Analytic procedure: Recordings were transcribed according to the conventions of Conversation Analysis (CA) [34], capturing the details of not only what was said in the interaction but also how that was said, including the relative timing of speech. Sequences focusing on lifestyle health behaviours were identified, then analysed in-depth using CA's method of identifying the relationships between what is done in speech (action), the form in which that action is conducted, and the sequences associated with that action and that form (e.g. Stivers et al., [35]) (on the application of CA in medical interaction, see Heritage and Maynard [36]). Analysis of the advice-giving sequences focused predominately on the linguistic format of the advice construction and the environment in which the advice was delivered.

Ethics: Ethics approval was granted by the Health Research Authority; South East Coast, Surrey Research Ethics Committee. Patients gave their written informed consent for the data to be used for future research purposes [32, 33]; personal identifiers have been removed from the transcripts and anonymised.

### 3. Results

Several formats for delivering lifestyle advice were identified, including *if*-conditional constructions [18, 19], imperative forms [16, 17], verbs of obligation [16, 17, 37], downgraded imperatives [37, 38], overt recommendations [16, 17], advice-implicative interrogatives [39, 40] and generalised cautions. Of these, the *if*-conditional construction – hereafter ICC – was overwhelmingly the most commonly used format (29.5%; n=65) [41]. Conditional constructions are compound structures generally consisting of two clauses, a dependent or *if*-clause and a main clause [42, 43]. The dependent (*if*-clause) and main clauses are connected with one other; the dependent clause describes implications or hypothetical situations, and the main clause expresses the consequences of the dependent clause. The dependent (*if*-clause) and main clauses are connected with one other; the dependent clause describes implications or hypothetical situations, and the main clause expresses the consequences of the dependent clause. Therefore, the turns in which doctors delivered advice through an ICC typically consisted of two components, the *if*-conditional construction indicating the patient's medical problem and whatever is causing the problem, and the advice delivery component, indicating the solution, i.e. the behaviour change that would help resolve the problem.

However, the order in which these components are delivered in the advice-giving package (in both turn construction and sequence) varied; in some instances, the ICC preceded the advice.

#### Extract 1

1 Dr: .hhh (.) **And if you're carrying a bi:t of extra wei:ght, (.)**  
2 **that might be an- (.) an extra facto:r behi:nd it, so: .hhh**  
3 (0.7) a:n cle:a:rly one of the big thi:ngs (0.2) e:rm (0.3)  
4 that wi:ll he:lp yo[u::: by] >from a physical point of  
5 Pt: [yeh ]  
6 Dr: **view<, an- >an- in- in terms of managing stress<, for that**  
7 **matter as we::ll (0.2) .hhh would be:: (0.4) u:rm: (1.3)**  
8 Pt: **lo::sing some timber,**

The first component in the doctor's advice in this extended turn is a dependant *if*-clause (line 1) highlighting what might be the cause of the patient's problem; the consequent clause (line 2) then links the patient's weight with their presenting health concern as being a contributing factor. The doctor then advised the patient that the behaviour change (losing weight and increasing exercise) would assist in alleviating the patient's medical problems (physical lump and stress).

In another ICC format, though the ICC (*if-then*) sequence follows a similar structure to the previous example, (i.e. the *if*-clause preceded the consequence), in the following example the ICC and advice-giving components are reversed, with the advice preceding the ICC.

#### Extract 2

1 Dr: **So you should be having at lea:st two days a week where**  
2 **you're not drinking anything**  
3 (0.5)  
4 Dr: °alright°  
5 (0.8)  
6 Pt: (Patient nods)  
7 (1.1)  
8 Dr: U:rm (0.6) .pt (1.5) And the reason that's re:levant to  
9 **this is if you're getting indigestion (0.4)**  
10 **an if you're coughing a lo:t, (0.5) .hh then it might actually**  
11 **be the alcoho:l that's causing those problems.**

Here the patient is advised to reduce her alcohol consumption (lines 1-2), which preceded the ICC in lines 9-11. Through the ICC, the doctor highlights the link between the patients presenting health conditions (indigestion and coughing, lines 9-10) and her alcohol consumption.

In a third ICC format, the advice was delivered through the ICC alone, as in the following extract.

#### Extract 3

1 Dr: **Tha- that- that's our- (.) That's ou:r (0.2) jo::b re:ally u:rm**

2 .hhh an I gue:ss what my:: my: thoughts are that (1.2) .pt  
 3 .hhh (0.6) i:f you: can I- (0.8) if >instead of havi:ng< .hhh  
 4 (0.2) three or fou:r you can make it (.) <two or three>.  
 5 Pt: hmm[m ]  
 6 Dr: [Litt]le cha:nges on a- on a long-term basis make a big  
 7 difference  
 8 Pt: hmm[hmm ]

Hence, the sequence of turns in which doctors delivered advice typically consisted of three components; an *if*-conditional construction, usually focusing on the patient's medical problem; a consequence component, i.e. a consequence of some problem (drinking too much alcohol, carrying extra weight); and the advice component (e.g. 'you should be having at least 2 days a week where you're not drinking anything). The advice is the behaviour change that would help to resolve the problem. These variations in the position of the two components were associated with differences in the design and function for each ICC:

- 1 When the *if*-conditional component *preceded* the advice-giving component, a link was established between the patient's problematic lifestyle behaviour and their presenting health condition, in such a way as to build the rationale for the advice delivery.
- 2 The delivery of the *if*-conditional component *following* the advice-giving component provided a retrospective account of the relevance of the advice to resolving the patient's particular health condition.
- 3 Alternatively, advice was delivered through and embedded in an *if*-conditional construction combining together a hypothetical context ('if you do such-and-such) with the benefit (consequence): in this way, advice was delivered simply as information rather than as an instruction to change behaviour.

Each of these three formats is considered more fully in the following section. The order in which they are considered is in accordance with the position of the conditional clause in relation to the advice segment, beginning with the *pre*- construction (i.e. the *if*-conditional clause coming before the advice), followed by the *post*- construction (the *if*-conditional clause placed after the advice), and finally the 'embedded' construction, in which the advice is *embedded in* the *if*-conditional clause

### ICC component pre-advice

Delivering the ICC *before* the advice component highlighted the cause for concern by specifying the relevant health problem and problematic lifestyle risk factor(s), thereby providing prospective accounts for the relevance and appropriateness of the upcoming advice.

Extract 4 [071012]

1 Dr: E:rm (0.2) I don't feel a:ny <phy:sica:l> lump to suggest  
2 anything sinister:r beh[ind it]  
3 Pt: [yeh ]  
4 Dr: .hhh (.) And If you're carrying a bi:t of extra wei:ght, (.)  
5 that might be an- (.) an extra facto:r behi:nd it, so: .hhh  
6 (0.7) a:n cle:a:rly one of the big thi:ngs (0.2) e:rm (0.3)  
7 that wi:ll he:lp yo[u:: by-] >from a physical point of  
8 Pt: [yeh ]  
9 Dr: view< an- >an- in- in terms of managing stress< for that  
10 matter as we::ll, (0.2) .hhhh **would be:: (0.4) u:rm: (1.3)**  
11 Pt: Lo::sing some timber,  
12 (0.8)  
13 Dr: **Yea:h a bit of exe::rci:se**  
14 Pt: =yea:h  
15 Dr: =I mean I- I guess you need to <get s↑e:ttle:d>, (0.5) **but a**  
16 **bit of e:xe::rci:se (0.4) <U:::r:mm:> (0.6) .hhh**  
17 **>You'know< .hhh (0.7) hhhh I- I- Ide::ally they (.) talk**  
18 **about (0.2) urm half an hour- (0.2) three to five times a:**  
19 **wee::k? (0.4) .hh U:::rm (0.2) but- (0.2) clearly it's**  
20 going to be dependent on what you can fit i:n, an' It needs  
21 to be something that you: (0.9) find some enjo:yment from, or  
22 you won't c[arry] on doing i:t.  
23 Pt: [y↑eh]

Through an ICC (lines 4-5), the doctor specified the patient's current lifestyle problem ('weight') as being a factor contributing to his presenting health concern. The conditional construction ('if you're carrying') here mitigated and managed the sensitive issue of the patient's weight by designing the advice through a potential or hypothetical scenario, without explicitly stating that the patient was overweight. The ICC here provided a prospective account for the advice. The patient's orientation to this sensitivity was evident in his euphemistic collaborative completion [44] of the doctor's continued advice, "losing some timber" (line 11); the doctor further advised the patient about exercise (line 13, 15-22).

In the following extract, the doctor used a pre-advice ICC form to topicalize and problematise the patient's smoking behaviour, as contributing to her presenting condition.

Extract 5 [040412]

1 Dr: **I mean, the reason I asked you about the smo:king i:s (.) as**  
2 **↓you pro:bably ↓kno:w, if you (.) [if ]someone who had**  
3 Pt: [huh]



**4 Dr: asthmatic tendencies and [has two bouts of pne]umonia:,**  
 5 Pt: [ ( ) ]  
 6 (0.3)  
**7 Dr: .hh °it's not rea:lly a good idea° [cause] it**  
 8 Pt: [yeh ]  
**9 Dr: will [be ( ) you: ]**  
 10 Pt: [It's more li'e a- its] not a (.) regula:r I'd say its  
 11 mo:re (0.7) a soci:al thi:ng  
 12 (0.2)  
 13 Dr: yes  
 14 (0.7)  
 15 Pt: ( )  
 16 (0.6)  
 17 Pt: >a h::owl< to stopping hhh  
 18 (0.4)  
 19 Dr: mm  
 20 Pt: I do want to stop. Yeah  
 21 Dr: yeah  
 22 (0.2)  
**23 Dr: .hhh Well (.) it wi:ll be a good idea to stop**

The doctor re-topicalised the patient's smoking behaviour from earlier in the consultation, (line 1), indicating that the reason (to quit smoking) would already have been 'known' to the patient (line 2; see Östman, [45]). The doctor's self-correction from "if you" to "if someone" mitigated the advice by depersonalising or generalising it ([18, 19]), framing it as advice they would give to anyone presenting with that particular health condition(s). Having thereby depersonalised the advice, the subsequent health conditions (line 4) were a direct repetition of the patient's previous account earlier in the consultation (data not shown). Thus, the *if*-clause created the condition to which the consequent clause (line 7) is made relevant; the ICC foregrounded the appropriateness of the advice by referring to the contribution of the patient's smoking behaviour to his health condition.

Pre-advice ICCs were used to topicalise the patient's health behaviour as contributing to their presenting health condition. Pre-advice ICCs occurred in the transition between the physical examination and diagnosis/treatment phases of the consultation, a context in which lifestyle behaviours had not been problematised prior to the advice segment. Pre-advice ICCs provided a framework for the upcoming advice, preparing the patient and thereby creating an environment for alignment between the doctor and patient.

#### ICC component post advice

The second ICC format positioned the *if*-conditional clause *after* the advice component. The advice having been delivered, the *if*-clause retrospectively justified that advice by highlighting its relevance to

the individual patient's presenting health concern. In contrast to the pre advice *if*-clause format, post-advice ICCs typically occur in sequences in which doctor and patient were not aligned, as evidenced by minimal acknowledgement or lack of uptake of the advice by the patient [16], as illustrated in the following extract.

Extract 6 [060812]

1 Dr: So e:ve:n two glasses of ma:rtini: (0.2) are not good  
2 for your health, (.) o:hka:y. every [da:y, th]at's  
3 Pt: [°yeh° ]  
4 Dr: still too °mu:ch°  
5 (0.5)  
6 C: here you are, (.) yeah  
7 **Dr: So you should be having at lea:st two days a week where**  
8 **you're not drinking anything**  
9 (0.5)  
10 Dr: °alright°  
11 (0.8)  
12 Pt: (Patient nods)  
13 (1.1)  
14 Dr: U:rm (0.6) .pt (1.5) And the reason that's re:levant to  
15 this is if you're getting indigestion (0.4)  
16 an if you're coughing a lo:t, (0.5) .hh then it might actually  
17 be the alcoho:l that's causing those problems.  
18 (0.5)

In lines 1-8, the doctor summarised the patient's alcohol consumption as problematic and advised the patient to reduce her alcohol intake (lines 7-8). The patient responded to the doctor's advice only minimally (line 3), nonverbally (line 12), ambiguously (line 6) or with silence (lines 5, 9 and 13). The *if*-clauses with which the doctor continued (lines 14-17) highlighted the link between the patient's presenting health concerns (indigestion and coughing), and her problematic alcohol consumption – hence the advice to reduce her drinking. Framing the patient's health conditions in this way retrospectively supported the advice without asserting this was necessary - the advice might only be necessary, if certain hypothetical circumstances obtained. An *if*-clause was added only after the advice, when the indications were that the patient was reluctant or not convinced by or was resistant to the advice (see also the patient's non-response in line 18).

The next extract is a further example of a post-advice *if*-clause providing a retrospective account for the relevance of advice, delivered when the doctor and patient were evidently misaligned, evidenced through no uptake by the recipient (i.e. no response throughout) to the advice to change his diet.

Extract 7 [111907]

1 Pt: so whats- (.) >whats the-< (0.4) prognosis for that  
2 (0.2)

3 Dr: tch. (0.5) .hhh U::rm (1.3) >wel-< (.) >they-< (.) I mean  
4 pi:les ca::n be a- an ongoing problem or they can be a  
5 >short-term problem< depending o::n (0.2) you'know it varies  
6 for different peo:ple. <<The ke::y thi:ng>> (0.2) really i:s to  
7 (0.2) change your di:e:t (.) U:rm so you have loa:ds of fruit  
8 and vegetables lots of hi:gh fibre (.) lots of flu:i:d .hhh  
9 (0.2) to make sure that your- (0.3) your bowel movements  
10 a:ren't ha::rd or painful  
11 (0.2)  
12 Dr: .hhh pt. because (0.2) The ha:rde:r the stool is (0.2) the more  
13 pressure it pu:ts: (0.2) on >your rectum< as you push it o:ut  
14 and then that pressure is what (.) causes the pi:les.  
15 Dr: So we can give yo:u (.) some crea:m (.) .hh to help (1.4)  
16 soo:the it and s- s- shrink it no:w  
17 (0.2)  
18 Dr: >but then< If you don't change your diet long term then it  
19 >can kind of< (.) they can come back (.) you' see.  
20 (0.8)  
21 Dr: I will show you a diagram ((Dr washing hands))

The doctor's response to the patient's enquiry about prognosis for his condition (piles) was to deliver dietary advice about alleviating the condition (lines 6-10), advice which the patient did not acknowledge, let alone accept (silences in lines 11 and end 17). The doctor's *if*-clause reinforced the importance of changing his diet by evidencing and warranting the prior advice, outlining the consequences of not following the advice, and suggesting a preventative measure.

Post advice *if*-clauses provided retrospective accounts highlighting the relevance of the advice by topicalizing the importance for the individual patient's presenting health concern. Post-advice ICCs are evident in environments of misalignment between the doctor and patient following advice delivery; and where the legitimacy of the advice has not been made explicit prior to the advice delivery, and is thus being delivered to an 'unprepared patient'.

### Advice embedded in ICC

The most frequently used ICC format used by doctors (n=48) was to deliver advice *through* an ICC, i.e. to embed an advice component within a hypothetical *if*-clause construction (*'if she keeps having more, then I want you to encourage her to contact alcohol recovery*).

### Extract 8 [020115]

1 Dr: .hhh So you:r body mass index is twenty four point <ni:ne> so  
2 it should be between twenty an twenty f*u*:ve so that's perfect,  
3 (0.2)  
4 Dr: .hhhh e:rm I suppo:se .hhh (0.2) a:ll of us our body max i:ndex  
5 tends to creep up as we get older .hhh (.) Just be wary because  
6 you're just at that borderline of that nor[mal] ra::nge  
7 Pt: [mm ]  
8 Dr: .hhh E:rm

9 Pt: So what- so: lose weight  
10 (0.2)  
11 Dr: uh- (0.3) hhhh  
12 Pt: Is that [the- ]  
13 Dr: [I mea]n >if you were to drop your weight down to<  
14 seventy five ki:lo:s that would get you comfortably within the  
15 no:rmal range s[o lo:se- ]  
16 Pt: [°ri:ght° ]  
17 (0.3)  
18 Dr: three and a half kilos something like that w[ould be]sufficient  
19 Pt: [is that]  
20 Pt: Is that a sto:ne?  
21 Dr: .hhh [U:rrm three: and a half kilo:s u::hh ]  
22 Pt: [no is that an ol' and old weight hah ]  
23 (0.6)  
24 Dr: U:h i:s abo::ut (0.2) half a stone  
25 Pt: right okay

Having assessed the patient's body mass index (BMI: weight (kg)/height (m<sup>2</sup>)) score as currently perfect (lines 1-2), the doctor considered the risks associated with the patient's (hypothetical) weight gain *in the future*, cautioning the patient to 'just be wary' of his BMI score, as 'our body mass index tends to creep up' (line 4-6). In his response in line 9, the patient anticipated where this was leading, i.e. to the advice that the doctor duly gave (lines 13-18). The *if*- clause of the construction was designed as advice through proposing a hypothetical situation - if the patient were to lose weight, 'then' the outcome would be that his BMI score would be 'comfortably within the normal range' (consequent clause) (lines 14-15). In this way, the ICC delivers mitigated advice embedded in an *if*-clause, thereby not directing the patient but instead suggesting that he should 'drop' their 'weight down'.

In the following extract, the doctor's advice about reducing fat (cholesterol) was embedded in the *if*-clause of an ICC.

Extract 9 [101702]

1 Dr: u:hh ye:ah (.) it's the fa:t on the mea:t (0.3)  
2 Pt: ohka:y  
3 Dr: an dai:ry produ[cts ]  
4 Pt: [prod]ucts  
5 Dr: =S[o: ]  
6 Pt: [ohk]ay  
7 Dr: the fa:t in (.) chee::ses the fat in the mi:lk .hhh (0.2) uh  
8 that are the issues  
9 Dr: =Soo uh- (0.2) for the mi[lk- ]  
10 Pt: [With th]e milk, I just dri:nk (.) >I'm  
11 on semi-skimm<  
12 Dr: You're on semi-skimmed alrea:[dy ]  
13 Pt [Yeah I] don' [uh: yeah: ]  
14 Dr: [>I'd recommend]  
15 that<

16 Dr: ye[a:h .hhhh ]  
 17 Pt: [(clears throat)]  
 18 (0.8)  
 19 Dr: **I thi:nk (1.3) if you wa:nted to try: (0.2) re:duci:ng (0.7) the**  
 20 **fa::ts (0.2) an' your chee:ses (0.7) hh to see what e:ffect that**  
 21 **ha:s on the cholesterol (0.7) we can do that (.) fi::rst.**  
 22 (0.8)  
 23 Dr: .hhh u:r (0.2) we don't have to go strai::ght onto a tablet  
 24 (0.6) if you want to try (0.8) a diet first  
 25 (0.4)  
 26 Pt: (cough cough) I will try the di[e::t ]  
 27 Dr [but I think]  
 28 Dr: I think the likelihood i:s that- (.) we're still going to  
 29 nee:d the tabl[e:ts ]  
 30 Pt: [tablets] yeah

Before this extract, the doctor had recommended medication to lower the patient's cholesterol; but here the doctor presented the patient with two treatment options (medication or diet change, lines 19-21), leaving the patient to decide which they would prefer to try first. The doctor's subsequent advice, "try reducing fats and cheeses" (lines 19-20) was embedded in an ICC, an *if*-clause. ICCs are a communication practice by which doctors can avoid the use of a directive when recommending treatments, and instead offer patient treatment options. The doctor continued and elaborated that health style advice (lines 23-24) only when the patient did not respond (line 22); this time, the patient agreed to begin with the diet option.

In the following extract, the doctor used an ICC to inform the patient about the available weight loss services, without directing the patient to take advantage of a service but leaving it to the patient to decide.

Extract 10 [091504]

1 Dr: Slimmi:ng clubs::[::::]  
 2 Pt: [U:::]rmm  
 3 (1.6)  
 4 Pt: Not as yet (.) no:  
 5 (0.7)  
 6 Dr: **wou[ld that be someth- ]**  
 7 Pt: [I'm thinking about] go:ing down that line, ye:ah.  
 8 Dr: Y[ea:h]  
 9 Pt: [Yeah]  
 10 (0.7)  
 11 Dr: We[ll- well- well-]  
 12 Pt: [Yea:h ] I kno:w cu:z my mum an my sisters had good  
 13 results with tha:t.  
 14 (0.4)  
 15 Dr: **W↑e::ll (0.8) it's >sort of a< (1.2) thing you should**  
 16 **think(.) S:E::riously abou'**  
 17 Dr: **I [mean if-] if- if that is something you'd like to do:::**

18 Pt: [yea:h ] ((nodding))  
 19 Pt: Ye:[ah ]  
 20 Dr: [we can] give you (0.2) subsidised initial sessions for the  
 21 swimming club through the N [H S ]  
 22 Pt: [ri::g]ht  
 23 Dr: >u:[r not swim]ming club (.) slimming club  
 24 Pt: [yeah ]  
 25 Pt: =Ye:ah  
 26 Dr: So:: urm (0.9) you'know if you would- (0.2) want to do tha:t  
 27 Pt: ye[ah ] ((nodding))  
 28 Dr: [an pe]ople do: find it helpful,  
 29 Pt: ye[ah ]  
 30 Dr: [then yo]u: could (.) just- u:r (.) call up our nurses-book  
 31 an appointment with our nurses:  
 32 Pt: Ri:[ght ] ((nodding))  
 33 Dr: [an they] could >weigh you and fill out the forms an< things  
 34 to give yo[u u:h] subsidised [sessio:n:ns]  
 35 Pt: [ye:ah] [ye:ah yeah]

Immediately before this excerpt, the doctor had established a link between the patient's weight (20 stone/127 kilos) and his presenting health concern (knee pain), enquired about the patient's current lifestyle behaviour, and acknowledged the steps the patient had taken to lose weight. Here, the doctor asked whether the patient had tried slimming clubs (line 1), which the patient confirmed he is “thinking about” (line 7). In the advice sequence beginning lines 15 to 16, the doctor suggested that the patient should “think seriously about” joining a weight management programme, advice that again is embedded within an *if*-clause (“if it’s something you’d like to do we can give you . . .”, lines 17 and 20).

Designing lifestyle talk as ICCs enabled doctors to manoeuvre around sensitive topic areas such as losing weight/dietary changes, while providing the patient with the information necessary to make an informed decision. Without overtly endorsing one treatment over another, ICCs enabled doctors to create a context in which they could deliver relevant information about the next steps to lifestyle management in a way that was not contingent on patient agreement or acceptance to the advice. In these instances, advice was delivered through giving information, rather than as instructing patients to follow a certain path.

## 4 Discussion and Conclusion

### 4.1 Discussion

Doctors most frequently delivered advice to patients about changing their lifestyle through *if*-conditional constructions (ICCs). Three types of ICCs were identified, distinguished by the different environments in which each construction was delivered relative to advice component. In pre-advice

ICCs, the ICC construction preceded the advice-giving component, thereby establishing a link between the patient's problematic lifestyle behaviour and their presenting health condition, in such a way as to build the rationale for the advice. Positioning the ICC before the advice enabled doctors to problematise patients' lifestyle risk factors for which advice was then a relevant next action. Pre-advice ICCs provided a *prospective* account of how the advice is relevant to the patient; advice was thereby delivered to a 'prepared recipient,' the problem having already been highlighted through an ICC.

Post-advice ICCs followed the advice component, providing a retrospective account of the relevance of the advice to the patient's particular health condition, thereby tailoring advice to the individual patient, a finding that develops further the findings of Kinnell and Maynard [18] and Silverman et al. [19]. In post advice conditionals, a pattern emerged in which the ICC was delivered in response to minimal or no patient uptake to advice, thereby further endorsing the advice and pursuing patient uptake.

In the third 'embedded' type of ICCs, the advice itself is constructed through and embedded in the conditional clause. These constructions were the most frequent format for delivering advice in the corpus; doctors build a hypothetical scenario of behaviour change, or health risk, e.g. '*if you would like some help with stopping smoking*' and '*If you are drinking regularly in the week*', so as to indicate ways of managing an actual or potential problem (e.g. dietary changes, smoking clinic), without the patient having to admit (or commit) to having experienced certain symptoms. Building a hypothetical context through an *if-conditional construction* is made relevant a 'remedial' action within the advice component. ICCs enabled advice to be delivered as information, without instructing the patient to adhere to future courses of action. In pre- and post- ICC formats, *if-conditionals* are used to build a case for the necessity of making lifestyle changes and thereby leave less scope for patient choice. By contrast, advice embedded in conditional constructions presented the patient with options, leaving it to what they might like to do (e.g. '*if you wanted to try to . . .*' in ex.9 above).

It is worth highlighting two of the properties that may underlie the frequency with which doctors use *if-conditional* constructions in giving lifestyle advice to patients in primary care. These underpin the perceived functional efficacy, or at least utility, of this construction when advising patients about adjustments they might make to their lifestyle, to alleviate actual or anticipated medical conditions. First, conditional constructions do not require the physical/medical circumstances (health problem) to be present at the time when advice is given, as these constructions can orient to possible futures; to a future in which those circumstances *might* obtain (i.e. if and when those conditions are fulfilled). Hence, *if-conditional* constructions can be used in circumstances when a 'problem-indicative response' has not

been forthcoming from a patient. In their study of Health Visitors giving advice to first-time mothers, Heritage and Sefi found that HVs initiated advice by first making an enquiry designed to elicit from the mother an account of a problem she was experiencing. That provided an opportunity for the HV to give the mother advice about resolving that difficulty. However, if in response to an HV's enquiry the mother did *not* report a problem that would block HVs' attempts to give advice. In those circumstances, HVs resorted to *if*-conditional constructions as a way round that block; they posed the advice as a means to resolve a problem that might arise in the future ('if you should' etc.). Although the mother might not be experiencing problems now, should she do so in the future (*if*) then 'here's what you can do' [i.e. delivering advice]. There is evidence that by formulating a hypothetical situation, *if*-conditional constructions work to manage, circumvent or even manoeuvre around actual or anticipated barriers to giving advice. Second, of the three *if*-conditional constructions identified in this study, the most frequently used format is that in which the advice component is embedded within a hypothetical *if*-clause construction. Each of the three *if*-conditional constructions leaves the decisions to patients; they orient to patient autonomy whilst differing in the degree to which they present patient choice. They are not directive forms [35]; they are not formally prescriptive nor 'assertive', thereby leaving decisions in the future, in response to future circumstances, to be made by patients. However, the design of this most commonly used 'embedded' format allows the patient greater scope for choice (e.g. *if you wanted to try reducing the fats* in extract 9, or *if that's something you'd like to do* in extract 10) by making the advised behaviour change contingent on the patient's preference or choice.

The examples presented illustrate the multi-functionality of ICCs in the context of giving lifestyle advice such as problematizing the patient's lifestyle behaviour, linking the lifestyle behaviour to the occurrence of the patients presenting health condition, warning against potential future health risks, prevention of further medical conditions, offering external services, and considering medication versus lifestyle. Over the past thirty years, there has been a shift from reactive healthcare based on the curative model, towards a more proactive healthcare service focusing on delivering health promotion and disease prevention [3, 46]. Research has stressed the importance of health promotion and disease prevention in primary care [47, 48]; however, this is often not reflected in practice, with low reported rates of lifestyle promotion leaving patients wanting more [49, 50]. Through ICCs, doctors can design lifestyle advice to inform and alert patients to potential future health risks associated with the patient's problematic lifestyle risk factors, thereby highlighting the role of lifestyle behaviour change in preventing or alleviating those risks.



#### *4.2 Limitations*

The study relied on a relatively small sample of interactions (n=86 consultations); while the method used lends itself to examining data sets of this size in detail, future studies may consider exploring the findings of this study across a larger data corpus.

#### *4.3 Conclusion*

These findings demonstrate that using ICCs in delivering lifestyle advice in primary care consultations **can** enable doctors to tailor advice to the patient's particular current health/medical circumstances. Through this format, doctors are able to build the framework for which advice is relevant, highlighting the relevance of advice in managing the patient's presenting condition(s), and implicitly endorsing the importance of following the advice for resolving adverse health conditions.

#### *4.4 Practice Implications*

*ICC* may provide health professionals a way to deliver personalised advice to patients on lifestyle health behaviours, providing health professionals with the means to navigate a sensitive activity (advice giving), and to anticipate potential difficulties in both the delivery and receipt of the advice.

#### Acknowledgements

I am grateful to all the patients and doctors who participated in the One in a Million study, which was funded by the NIHR School for Primary Care Research. Marcus Jepson collected all data with support from the CRN: West of England. This research was conducted as part of a Centre for Doctoral Training Research group exploring chronic disease prevention at Loughborough University.

## References:

- [1] J. E. Bennett, G. A. Stevens, C. D. Mathers, R. Bonita, J. Rehm, M. E. Kruk, K. Chalkidou, NCD Countdown 2030: worldwide trends in non-communicable disease mortality and progress towards Sustainable Development Goal target 3.4, *The Lancet*, 392(10152) (2018) 1072-1088.  
[https://doi.org/10.1016/S0140-6736\(18\)31992-5](https://doi.org/10.1016/S0140-6736(18)31992-5)
- [2] M. T. Brown, J. K. Bussell, Medication adherence: WHO cares? Paper presented at the Mayo clinic proceedings 86(4) (2011) 204-314. <https://doi.org/10.4065/mcp.2010.0575>
- [3] G. E. Jr. Hardy, The burden of chronic disease: the future is prevention. Introduction to Dr. James Marks' presentation, "The Burden of Chronic Disease and the Future of Public Health". *Prev Chronic Dis*, 1(2) (2004).
- [4] D.E. Bloom, E. Cafiero, E. Jané-Llopis, S. Abrahams-Gessel, L. R. Bloom, S. Fathima, D. O'Farrell, The global economic burden of noncommunicable diseases (No. 8712). *Program on the Global Demography of Aging* (2012).
- [5] S. Cortaredona, B. Ventelou, The extra cost of comorbidity: multiple illnesses and the economic burden of non-communicable diseases. *BMC medicine*, 15(1), (2017) 216.  
<https://doi.org/10.1186/s12916-017-0978-2>
- [6] Department of Healthcare, Tackling Chronic Disease: A Policy Framework for the Management of Chronic Disease. In: Department of Health and Children Dublin, Ireland (2008).
- [7] E. Dean, A. Söderlund, What is the role of lifestyle behaviour change associated with noncommunicable disease risk in managing musculoskeletal health conditions with special reference to chronic pain? *BMC musculoskeletal disorders*, 16(1), (2015).  
<https://doi.org/10.1186/s12891-015-0545-y>
- [8] B. Baird, A. Charles, M. Honeyman, D. Maguire, P. Das, Understanding pressures in general practice: King's Fund London (2016).
- [9] F. Newell, Framework for patient and public participation in primary care commissioning. NHS England (2016).
- [10] G. Walt, P. Vaughan, Primary health care: what does it mean? *Tropical doctor*, 12(3), (1982a) 99.  
<https://doi.org/10.1177/004947558201200302>

- [11] G. Walt, P. Vaughan, Primary health care approach: how did it evolve? *Tropical doctor*, 12(4), (1982b) 145-147. <https://doi.org/10.1177/004947558201200401>
- [12] E. Abildsnes, L.T. Walseth, S.A. Flottorp, P.S. Stensland, Lifestyle consultation in general practice—the doctor's toolbox: a qualitative focus group study. *Family practice*, 28(2) (2011) 220-225. <https://doi.org/10.1093/fampra/cm9093>
- [13] R. Ashenden, C. Silagy, D. Weller, A systematic review of the effectiveness of promoting lifestyle change in general practice. *Family practice*, 14(2), (1997)160-176. <https://doi.org/10.1093/fampra/14.2.160>
- [14] F. Douglas, N. Torrance, E. Van Teijlingen, S. Meloni, A. Kerr, Primary care staff's views and experiences related to routinely advising patients about physical activity. A questionnaire survey. *BMC public health*, 6(1), (2006) 138. <https://doi.org/10.1186/1471-2458-6-138>
- [15] D. A. Lawlor, S. Keen, R. D Neal, Can general practitioners influence the nation's health through a population approach to provision of lifestyle advice? *Br J Gen Pract*, 50(455) (2000) 455-459.
- [16] J. Heritage, S. Sefi Dilemmas of advice: Aspects of the delivery and reception of advice in interactions between health visitors and first-time mothers. *Talk at work: Interaction in institutional settings* 359 (1992): 417.
- [17] V. Leppanen, The straightforwardness of advice: Advice-giving in interactions between Swedish district nurses and patients. *Research on Language and Social Interaction*, 31(2), (1998) 209-239. [https://doi.org/10.1207/s15327973rlsi3102\\_3](https://doi.org/10.1207/s15327973rlsi3102_3)
- [18] A. M. K. Kinnell, D. W. Maynard, The delivery and receipt of safer sex advice in pretest counseling sessions for HIV and AIDS. *Journal of Contemporary Ethnography*, 24(4), (1996) 405-437. <https://doi.org/10.1177/089124196024004002>
- [19] D. Silverman, A. Perakyla, R. Bor, Discussing safer sex in HIV counselling: assessing three communication formats. *AIDS care*, 4(1), (1992) 69-82. <https://doi.org/10.1080/09540129208251621>
- [20] A. Pilnick, Patient counseling by pharmacists: advice, information, or instruction?." *Sociological Quarterly* 40 (4), (1999): 613-622.
- [21] A. Vayreda, and C. Antaki, Social support and unsolicited advice in a bipolar disorder online forum." *Qualitative health research* 19 (7), (2009) 931-942.

- [22] C. Antaki, and S. Bloch, Advising without personalising: how a helpline may satisfy callers without giving medical advice beyond its remit. *Sociology of Health & Illness*, 42(5), (2020) pp.1202-1219.
- [23] C. Bergen, The conditional legitimacy of behavior change advice in primary care. *Social Science & Medicine* (2020): 112985.
- [24] C. Albury, A. Hall, A. Syed, S. Ziebland, E. Stokoe, N. Roberts, H. Webb, and P. Aveyard, Communication practices for delivering health behaviour change conversations in primary care: a systematic review and thematic synthesis. *BMC family practice* 20, no. 1 (2019): 111.
- [25] C. Albury, E. Stokoe, S. Ziebland, H. Webb, and P. Aveyard, GP-delivered brief weight loss interventions: a cohort study of patient responses and subsequent actions, using conversation analysis in UK primary care. *British Journal of General Practice* 68, no. 674 (2018): e646-e653.
- [26] J. Heritage, A. Lindström, Advice giving—terminable and interminable: The case of British health visitors. *Advice in discourse* 221, (2012): 169-194.
- [27] A. Pilnick, 'Why didn't you say just that?' Dealing with issues of asymmetry, knowledge and competence in the pharmacist/client encounter. *Sociology of Health & Illness* 20, no. 1 (1998): 29-51.
- [28] A. Hepburn, and J. Potter, Designing the recipient: Managing advice resistance in institutional settings. *Social Psychology Quarterly* 74, no. 2 (2011): 216-241.
- [29] D. W. Maynard, Interaction and asymmetry in clinical discourse. *American journal of sociology* 97, no. 2 (1991): 448-495.
- [30] A. Pilnick, and T. Coleman, "I'll give up smoking when you get me better": patients' resistance to attempts to problematise smoking in general practice (GP) consultations. *Social science & medicine* 57, no. 1 (2003): 135-145.
- [31] J. Heritage, and T. Stivers, Online commentary in acute medical visits: a method of shaping patient expectations. *Social science & medicine* 49, no. 11 (1999): 1501-1517.
- [32] R. K. Barnes, One in a Million: a study of primary care consultations. (2017).  
<https://doi.org/10.5523/bris.l3sq4s0w66ln1x20sye7s47wv>
- [33] M. Jepson, C. Salisbury, M. J. Ridd, C. Metcalfe, L. Garside, R. K. Barnes, R. K., The 'One in a Million' study: creating a database of UK primary care consultations. *Br J Gen Pract*, 67(658) (2017) e345-e351. <https://doi.org/10.3399/bjgp17X690521>
- [34] G. Jefferson, Glossary of transcript symbols with an introduction. *Pragmatics and Beyond New Series* 125 (2004): 13-34.

- [35] T. Stivers, J. Heritage, R. K. Barnes, R. McCabe, L. Thompson, M. Toerien, Treatment recommendations as actions. *Health Communication*, 33(11), (2018) 1335-1344.
- [36] J. Heritage, D. W. Maynard, Conversation analysis, doctor-patient interaction and medical communication. *Medical Education*, 39, (2005), 428-435.
- [37] C. Shaw, A. Hepburn, Managing the moral implications of advice in informal interaction. *Research on Language and Social Interaction* 46, no. 4 (2013): 344-362.
- [38] C. West, Not Just Doctors' Orders': Directive-Response Sequences in Patients' Visits to Women and Men Physicians. *Discourse & Society* 1, no. 1 (1990): 85-112.
- [39] C. W. Butler, J. Potter, S. Danby, M. Emmison, A. Hepburn, Advice-implicative interrogatives: Building "client-centered" support in a children's helpline. *Social Psychology Quarterly* 73, no. 3 (2010), 265-287.
- [40] C. Shaw, J. Potter, A. Hepburn, Advice-implicative actions: Using interrogatives and assessments to deliver advice in mundane conversation. *Discourse Studies* 17, no. 3 (2015), 317-342.
- [41] K. Connabeer, Lifestyle advice in UK primary care consultations. PhD diss., Loughborough University, 2019
- [42] B. Dancygier, and E. Sweetser, Constructions with if, since, and because: Causality, epistemic stance, and clause order. *Topics in English Linguistics* 33 (2000): 111-142.
- [43] R Narayanan, B. Liu, and A. Choudhary, Sentiment analysis of conditional sentences. In *Proceedings of the 2009 conference on empirical methods in natural language processing*, pp. 180-189. 2009.
- [44] G. H. Lerner, Collaborative turn sequences. *Pragmatics and beyond new series* 125 (2004): 225-256.
- [45] J. O. Östman, 'You Know': A discourse-functional study: John Benjamins Publishing (1981).
- [46] A. Wise, E. MacIntosh, N. Rajakulendran, Z. Khayat, Transforming health: Shifting from reactive to proactive and predictive care. (2016).
- [47] S. Klein, N.F. Sheard, X. Pi-Sunyer, A. Daly, J. Wylie-Rosett, K. Kulkarni, N. G. Clark, Weight management through lifestyle modification for the prevention and management of type 2 diabetes: rationale and strategies. A statement of the American Diabetes Association, the North American Association for the Study of Obesity, and the American Society for Clinical Nutrition. *The American journal of clinical nutrition*, 80(2), (2004) 257-263. <https://doi.org/10.1093/ajcn/80.2.257>

- [48] W. C. Willett, J. P. Koplan, R. Nugent, C. Dusenbury, P. Puska, T.A. Gaziano, Prevention of chronic disease by means of diet and lifestyle changes. In *Disease Control Priorities in Developing Countries*. 2nd edition: The International Bank for Reconstruction and Development/The World Bank (2006).
- [49] J. Noordman, P. Verhaak, S. van Dulmen, Discussing patient's lifestyle choices in the consulting room: analysis of GP-patient consultations between 1975 and 2008. *BMC family practice*, 11(1), (2010) 87. <https://doi.org/10.1186/1471-2296-11-87>
- [50] M. J. Duaso, P. Cheung, Health promotion and lifestyle advice in a general practice: what do patients think? *Journal of advanced nursing*, 39(5), (2002) 472-479. <https://doi.org/10.1046/j.1365-2648.2002.02312.x>