'A diabetic' versus 'a person with diabetes': the impact of language on beliefs about diabetes

Jane Ogden,[1] BSc, PhD, Professor in Health Psychology
Kirstie Parkes,[1] BSc, Undergraduate student

[1]Department of Psychology, University of Surrey, UK

Correspondence to: Jane Ogden, Professor in Health Psychology, Department of Psychology, University of Surrey, Guildford GU2 7XH, UK; email: J.Ogden@surrey.ac.uk

Summary

Many organisations avoid disease-based labels such as 'diabetic' or 'epileptic' as they are believed to be detrimental to a patient's beliefs about their condition and may generate stigma.

The aim of this study was to examine the impact of the term 'a diabetic' compared with the term 'a person with diabetes' on the beliefs of participants who either did or did not have the condition.

The study used an experimental design and was in two parts, with study cohorts derived from Diabetes UK websites and the University of Surrey website. Part 1 evaluated the impact of the two terms – 'a diabetic' and 'a person with diabetes' – on participants who had diabetes, in relation to their beliefs about the condition, using the Revised Illness Perception Questionnaire. Part 2 measured the impact of these two terms on participants without diabetes in relation to their positive and negative stereotypes of the condition.

Data were gathered for 92 participants with diabetes (Part 1) and for 99 participants without diabetes (Part 2). The results showed no significant differences between the term 'a diabetic' compared with the term 'a person with diabetes' on either the beliefs of people with diabetes or the stereotypical attitudes of people without diabetes.

In conclusion, the results suggest that the two terms are not as different as has been sometimes assumed.

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Key words

diabetes; labels; diagnosis; patient beliefs

Introduction

Leading health organisations recommend avoiding disease-based labels when referring to patients such as 'asthmatic', 'epileptic' and 'diabetic', and prefer phrases such as 'person with asthma/epilepsy/diabetes' as it is believed that the label may be detrimental to patient self-management and could be associated with stigma. For example, in their literature Diabetes UK does not refer to 'diabetics' but uses the term 'people with diabetes' and the Head of Policy at Diabetes UK said: 'The reason for this is to avoid labelling the person as a medical condition and to encourage people that they can live a healthy active life if they manage their diabetes well' [personal correspondence, 2011]. Further, Diabetes UK's academic journal states that '*Diabetic Medicine* does not recognise the term "diabetic" as a noun. Preferred style is "patient with diabetes" or "in the group without diabetes".'[1]

Similarly, the Diabetes Australia Position Statement on Language[2] argued that the term 'diabetic' should be replaced with either 'person with diabetes' or 'person living with diabetes' and suggested that: 'The term "diabetic" defines the individual as their health condition. It is better to emphasise the person's ability to live with diabetes. Labelling someone as "diabetic" positions diabetes as the defining factor of their life.'

Disease-based labels are therefore believed to be detrimental to patient self-care and wellbeing. In particular, it is assumed that specific words can change the ways in which an individual makes sense of their condition.

The aim of the present experimental study was therefore to explore the impact of the terms 'a diabetic' or 'a person with diabetes' on beliefs and stereotypical attitudes about the condition in people with and without diabetes. This is in line with previous research which has explored the impact of language on people's conceptualisations of a range of conditions. For example, a series of experimental studies have compared the impact of medical terms such as 'gastroenteritis', 'heart failure', 'tonsillitis' and 'obesity' to either lay terms such as 'stomach upset' or euphemisms such as 'fluid on your lungs as your heart is not pumping hard enough' (for heart failure) or 'your weight may be damaging your health' (for obesity).[3–6] In general, the above language-based studies indicate that simply changing the way in which a condition is labelled can influence how patients conceptualise their problem. The results, however, are not always consistent as, while a more medical term may have beneficial consequences such as improving trust and confidence in the doctor and encouraging people to recognise the severity of their problem, it can also generate blame and anxiety which may undermine attempts at self-management. Furthermore, one randomised controlled trial indicated that patient satisfaction with the consultation was higher when the doctor matched their own language rather than using consistently either lay or medical terms.[6]

Some research has also explored the impact of language on the beliefs held about an illness by those not suffering from that condition. For example, Mosher and Danoff-Burg[7] reported that the term 'cancer patients' was viewed more negatively than 'cancer survivors', with participants stating that they would feel less inclined to interact socially with a 'patient' than a 'survivor'.

In sum, therefore, many organisations argue that disease-based labels should be avoided as they may be detrimental to how people conceptualise the condition being described. Furthermore, empirical studies indicate that the ways in which a condition is labelled may alter patients' views of the condition. To date, however, this assumption remains untested in the context of diabetes.

This paper presents the results from a two-part experimental study designed to examine the impact of the terms 'diabetic' and 'person with diabetes' on beliefs about diabetes. The first part examined the impact of these terms on the beliefs of those with diabetes and draws upon the framework of illness cognitions developed by Leventhal and colleagues[8] in the Self Regulatory Model which suggests that people develop representations of their condition that influence their subsequent coping and adjustment. The second part examined the impact of these terms on the beliefs of participants without diabetes to assess whether different terms generate different stereotypical beliefs. Both parts were granted ethics approval by the University of Surrey Ethics Committee.

Methods

Part 1: language impact on beliefs about diabetes in participants with the condition

Design. An experimental vignette design was used with two conditions – 'a diabetic' vs 'a person with diabetes' – in which participants were asked to read the vignette and then rate a series of statements to describe how they would feel if they were in that situation.

Participants. Questionnaires were completed by 92 participants with diabetes, aged over 18 years. Participants were visitors to the Diabetes UK Facebook and Twitter pages and staff and students from the University. Diabetes UK is the largest organisation in the UK working for people with diabetes and their Facebook page is their fastest growing online community. Of the completed questionnaires, 52 responded to the 'diabetic' vignette and 40 to the 'person with diabetes' vignette. This uneven distribution reflects that the completion rate was higher for those allocated to the 'diabetic' condition than the 'person with diabetes' condition.

Measures. Participants were asked to read the following vignette: 'A specialist nurse has called you in for an appointment because you have been identified as ...' [*either* 'a diabetic' *or* 'a person with diabetes'; this allocation was randomised by the computer].

Participants were then asked to rate a series of statements to describe their beliefs about their condition. These statements were from the IPQ-R (Revised Illness Perception Questionnaire)[9] and rated on a 5-point Likert scale ranging from 'not at all' (1) to 'totally' (5). This scale is freely available and has been used extensively for a wide range of cross-sectional and intervention studies.[10] For the present study, seven subscales of the IPQ-R were chosen to examine participants' beliefs about their condition. In addition, one subscale reflecting trust in the doctor was included. These subscales have all been used in previous research exploring the impact of medical terminology on beliefs.[4–6] All subscales consisted of three items apart from 'timeline' which had two items and 'consequences' which had four items.

Reliability of the scales was assessed using Cronbach's alpha and Pearson's correlation and for most scales was of an acceptable level (i.e. >0.6):

i.   Patient understanding (e.g. 'you understand your condition'; $\alpha = 0.67$).
ii. Consequences (e.g. 'your condition is a serious condition'; $\alpha = 0.70$).
iii. Personal control (e.g. 'you have the power to affect your condition'; $\alpha = 0.61$).
iv. Timeline (e.g. 'your condition will pass quickly'; $r = -0.05$).
v.   Emotional representations (e.g. 'having this condition makes you feel anxious'; $\alpha = 0.89$).
vi. Treatment control (e.g. 'your treatment can control your condition'; $\alpha = 0.46$).
vii. Cyclical timeline (e.g. 'your symptoms will come and go in cycles'; $\alpha = 0.65$).
viii. Trust in doctor (e.g. 'this diagnosis reassures you that the doctor is telling the truth'; $\alpha = 0.76$).

Two subscales relating to timeline and treatment control were low, however, and this may have influenced the results. The data were analysed by summating the items into the eight subscales. A higher score reflected: better understanding of their diabetes; more serious consequences; more personal and treatment control; a longer timeline; a more negative emotional response; a sense that the condition would change more over time; and greater trust in the doctor.

Participants also provided basic demographic information (age, sex, ethnicity, level of education, how often they had visited the general practitioner [GP] in the past year), and indicated the type of diabetes they had, how long they had had it and how they treated their condition.

Data analysis. The data were analysed to describe participants' demographic characteristics using

Variable	All participants (n=92)	'Person with diabetes' (n=40)	'A diabetic' (n=52)	χ^2 / t value	p value
Age (mean [SD])	37.4 (12.71)	38.42 (14.08)	36.62 (11.62)	t=0.67	0.5
Sex				χ^2=3.29	0.07
Male	30 (32.6%)	9	21		
Female	62 (67.4%)	31	31		
Education				χ^2=1.73	0.18
Less than degree	48 (52.2%)	24	24		
Degree or above	44 (47.8%)	16	28		
Type of diabetes				χ^2=0.14	0.7
Type 1	64 (69.6%)	27	37		
Type 2	28 (30.4%)	13	15		
Dietary management				χ^2=0.34	0.6
No	52 (56.5%)	24	28		
Yes	40 (43.5%)	16	24		
Medication				χ^2=0.23	0.2
No	60 (65.2%)	25	35		
Yes	32 (34.8%)	15	17		
Insulin				χ^2=0.004	0.9
No	25 (27.2%)	11	14		
Yes	67 (72.8%)	29	38		
Duration of diagnosis				χ^2=2.87	0.09
<1 year	19 (20.7%)	5	14		
≥1 year	73 (79.3%)	35	38		
No. of visits to doctor in past year				χ^2=0.2	0.7
0–3	46 (50%)	19	27		
≥4	46 (50%)	21	25		

Table 1. Part 1: demographics, by condition, for participants with diabetes

descriptive statistics, to explore differences in the demographic characteristics by condition using t-tests and chi square, and to explore the effect of the two terms on participants' beliefs about diabetes using t-tests.

Part 2: language impact on stereotypical views of participants without diabetes
Design. An experimental vignette design was used with two conditions: 'a diabetic' vs 'a person with diabetes'.

Participants. Participants comprised 99 staff and students from the University of Surrey. Participants were excluded if they were <18 years old or had diabetes. Of the 99 completed questionnaires, 54 responded to the 'diabetic' vignette and 45 to the 'person with diabetes' vignette. Again, this uneven distribution reflects the completion rates for the two conditions.

Measures. Participants were asked to read the following vignette: 'You

meet someone at work who is ...' [*either* 'a diabetic' *or* 'a person with diabetes'; this allocation was randomised by the computer].

Participants were then asked to rate 12 positive and negative attributes of the person using a 5-point Likert scale ranging from 'not at all' (1) to 'totally' (5): lazy; fat; athletic; slim; old; can live a normal healthy life; cannot eat certain foods; young; is a hard worker; may have diabetes because it was in their genes; can eat anything they want in moderation; is unfit.

These statements were adapted from a list of stereotypical terms from the Obese Stereotypes Scale[11] in conjunction with those most commonly described by people with diabetes in a Health Discussion Forum.

Participants also provided demographic information (age, sex, ethnicity, and level of education), and stated if they knew anyone with diabetes.

Data analysis. The data were analysed to describe participants' demographic characteristics using descriptive statistics, to explore differences in the demographic characteristics by condition using t-tests and chi square, and to assess the impact of the two conditions on participants' stereotypical beliefs about diabetes using t-tests.

Results
Part 1
Participants' demographic characteristics. The demographic characteristics for all participants and by condition are shown in Table 1. Participants' mean age was 37 years; 67.4% were female, 97.8% were white, and 47.8% had at least an undergraduate degree. Over half of the participants had type 1 diabetes (69.6%), had been diagnosed for more than a year (79.3%) and were split in terms of visiting their GP more or less than three times in the past year.

In addition, the majority described their condition as type 1 diabetes, used insulin to manage

their condition (72.8%) and a third used either/or diet and medication. The results showed no significant differences in demographics between the two conditions.

The impact of the two terms on participants' beliefs about their diabetes. Differences in beliefs by condition are shown in Table 2. The results showed no significant differences between the two terms on any of the eight belief subscales.

Part 2
Participant demographic characteristics. Participants' demographic characteristics for all respondents by condition are shown in Table 3. Participants had a mean age of 35 years, were mostly female (73.7%), white (91.8%), and had at least an undergraduate degree (79.8%). The large majority of the participants knew someone with diabetes. There were no differences in demographics between the two conditions.

The main effect of condition on participants' attitudes about diabetes. Univariate differences in attitudes by condition are shown in Table 4. The results showed no significant effect of condition on participants' positive or negative attitudes to diabetes.

Discussion
Many organisations discourage the use of disease-based labels on the basis that they may be detrimental to the patient's beliefs about their condition and may promote negative stereotypes in non-patients.[1,2] The present study aimed to provide an empirical basis for drawing this conclusion and to explore whether the terms 'a diabetic' and 'a person with diabetes' have a different impact on the beliefs about diabetes of those with and without the condition. The results from Part 1 indicated no differences between the terms 'a diabetic' and 'a person with diabetes' in terms of their

Variable	'Person with diabetes' (n=40)	'A diabetic' (n=52)	t value	Partial eta squared	p value
Understanding	3.80±0.79	3.68±1.12	0.57	0.003	0.56
Consequence	3.39±0.91	3.49±0.74	0.55	0.003	0.57
Trust in the doctor	3.57±1.06	3.80±0.96	1.06	0.012	0.28
Personal control	2.05±0.96	1.92±0.90	0.65	0.005	0.51
Timeline	4.71±0.62	4.77±0.42	-0.6	0.004	0.54
Emotional representations	2.67±1.29	3.00±1.22	0.88	0.009	0.37
Treatment control	3.04±0.87	2.98±0.71	0.36	0.001	0.71
Cyclical timeline	2.59±0.93	2.94±0.92	1.82	0.036	0.07

Table 2. Part 1: differences in beliefs about diabetes, by condition, for participants with diabetes (means ± SD)

Variable	All participants (n=99)	'Person with diabetes' (n=45)	'A diabetic' (n=54)	χ^2 / t value	p value
Age (mean [SD])	35.21 (12.56)	37.11 (12.70)	33.60 (12.34)	t=1.38	0.2

Sex
  Male
  Female
	25 (25.3%)
	73 (73.7%)
		10
		35
			15
			38
				χ^2=0.5	0.5

Education
  Less than degree
  Degree or above
	20 (20.2%)
	78 (79.8%)
		6
		39
			14
			39
				χ^2=2.56	0.1

Do you know someone with diabetes?
  No
  Yes
	20 (20.2%)
	79 (79.8%)
		8
		37
			12
			42
				χ^2=2.7	0.1

Table 3. Part 2: demographics, by condition, for participants without diabetes

impact on patients' beliefs about their condition. Similarly, the results from Part 2 indicated that these terms did not generate significantly different positive or negative stereotypical attitudes. These results indicate that these terms may not be as different as sometimes assumed. This absence of a differential impact of these two terms

is in contrast to the predictions made by some charities,[1,2] and also conflicts with previous research that indicates that different terms can differentially impact upon the ways in which people conceptualise their health problem.[3–6] It also contrasts with research which had addressed attitudes of a non-patient sample.[7] These

previous studies, however, have compared terms which are fundamentally different, such as, 'gastroenteritis' vs 'stomach upset', 'obesity' vs 'your weight may be damaging your health' or 'heart failure' vs 'fluid on your lungs as your heart is not pumping hard enough', whereas the terms used in the present study were highly similar and derivatives of the same root term 'diabetes'. Accordingly, the ways in which a condition is labelled may impact upon how people conceptualise the condition in question, but only when the terms being compared are clearly discrete and unrelated.

Limitations and strengths

There are several problems with the study which need to be considered. Primarily, Part 1 used a vignette design in which people with diabetes were presented with a scenario. Such a design has limitations in terms of ecological validity as, although the participants were patients with diabetes, the consultation was hypothetical rather than real. This approach, however, facilitated collection of data from a sample of participants with diabetes without the potential for causing upset which could have occurred from a more naturalistic study with a health professional randomly using one of the two terms to different patients.

Secondly, Part 2 used descriptive terms to access stereotypical attitudes to those with diabetes. It is possible that the use of an attitude checklist only accesses attitudes which are explicit, rather than implicit and may be open to problems of social desirability. Given the experimental nature of the study, and the similarity between the terms used, such problems would be equivalent across each condition.

Thirdly, the reliability of some of the constructs measured in Part 1 was low which may have influenced the analysis. The IPQ, however, is a frequently used scale that has been

Variable	'Person with diabetes' (n=45)	'A diabetic' (n=54)	t value	Partial eta squared	p value
Lazy	1.13±0.50	1.30±0.66	1.38	0.19	0.16
Fat	1.62±0.93	1.67±0.91	0.23	0.001	0.81
Athletic	1.93±0.93	1.98±0.92	0.25	0.001	0.79
Slim	1.98±0.94	2.00±0.95	0.11	0.0001	0.9
Old	1.98±0.91	1.87±0.95	0.56	0.003	0.57
Healthy	3.71±1.21	3.67±1.08	0.19	0.0001	0.84
Can't eat certain food	3.93±1.09	3.74±1.24	0.8	0.007	0.42
Young	1.80±0.94	2.07±1.00	1.38	0.019	0.16
Hard worker	2.00±1.04	2.35±1.01	1.69	0.029	0.09
May result from genes	3.58±1.17	3.57±0.98	0.01	0.0001	0.98
Can eat anything	2.71±1.25	2.87±1.11	0.66	0.005	0.5
Unfit	1.71±0.96	1.89±0.98	-0.9	0.008	0.37

Table 4. Part 2: differences in beliefs about diabetes, by condition, for participants without diabetes (means ± SD)

used extensively in both cross-sectional and intervention studies.

Finally, the study used a simple experimental design as a means to blind the participants as to the aims of the study and to examine the impact of the two terms without their awareness that this is what was being compared. Such a design, however, may miss many of the complexities of language use and the impact of language on both the cognition and emotions of the recipient. Future studies could therefore use qualitative approaches to enable a more in-depth analysis of the consequences of different terms.

Implications for practice

Many organisations discourage the use of disease-based labels. The results from the present study indicate that using terms such as 'a diabetic' has no differential impact compared to a more general term such as 'a person with diabetes'. There would seem to be no evidence to support a preference for either term for patients or non-patients in the context of both beliefs about the condition and stereotypical attitudes. A disease-based label would therefore appear to be no more or less labelling, stigmatising or detrimental than a more general term. Accordingly, health professionals should not be deterred from using the term 'a diabetic' either in the context of a patient consultation or in general conversation with other health professionals unless a patient expresses a specific view on how they would prefer to be labelled. However, similarly, neither should health professionals be encouraged to use the term 'a person with diabetes'.

It is therefore suggested that health professionals are encouraged

to use the term which best seems to fit with each individual patient in terms of the patient's own language and perspective rather than consistently attempting to use a language prescribed by an external organisation. Perhaps, therefore, the preferred approach would be for the health professional to match their language with that of the patient and to enable each patient to take the lead in determining how they and their condition are described.[6]

Conclusions

The present study aimed to assess whether the terms 'a diabetic' and 'a person with diabetes' have a different impact on the beliefs of those with or without condition. The results showed no differences between these two terms providing no empirical support for current guidelines suggesting that 'a person with diabetes' is preferential to 'a diabetic'.[1,2] Future research could address whether this is also the case for other potentially damaging terms such as 'an asthmatic' or 'an epileptic'. It could also explore the impact of different labels in the longer term on aspects of patient self-management such as behaviour changes and adherence to medication. Further, research could also explore such effects in real-life consultations.

Acknowledgement

Declaration of interests

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