Commentary

The Effect of Words on Health and Diabetes

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Abstract

This article discusses the effect of words on diabetes. People with diabetes are exposed to the language health care professionals (HCPs) use, in both speaking and writing, and those words may contribute to an already stressful illness experience. Language is a significant part of every person’s context, and context shapes experience. There is evidence that words can affect responses to health-related situations and may even lead to a stress response. HCPs often discuss delivering diabetes care in an empowerment model, and so far that has not included using language that is consistent with the approach. Awareness is the first step toward identifying and changing the words HCPs use with people who have diabetes.

Behavioral scientists have been studying and writing about the impact of words on health for several decades (1,2). Diabetes health care professionals (HCPs) (3–5) and consumers (6–8) have been writing about language almost as long. But despite a push for empowerment (9) and compassion (10), it appears that the words HCPs use when talking to or about people with diabetes have not changed. The purpose of this article is to review and discuss what has been written about language, and the possible effects language can have on health and especially diabetes management.

There are a variety of approaches to working with people who have diabetes, but are they working? Although recent statistics show that rates of diabetes-related complications have decreased (11) and A1C, blood pressure, and LDL cholesterol levels have improved since the late 1980s, almost half the people with diabetes in the United States still are not achieving these targets (12). Meanwhile, people are developing diabetes at exponential rates (13,14). Figuring out how to help the rest of the diabetes population achieve healthier outcomes eludes HCPs worldwide. In a time when the health care system is undergoing significant change and diabetes incidence is continuing to rise, it is appropriate to look at other factors that might play a role.

The language HCPs use to describe and explain health conditions evolved from an acute care model, which is the origin of the current health care delivery model. Many of the words HCPs use came from a time when a “patient”—a word originally meaning “a sufferer or victim” (15)—had acute health problems. The HCP’s job was to “treat” people or tell them what to do and send them on their way once they were better. Words such as “compliance” and “adherence” have been denounced for decades (3,6,16,17), yet they have not been replaced. Health care delivery, technology, and practice have changed, and yet—at least in diabetes care—language has not.
“Diabetic”
Beatrice Wright (1) led the movement away from words such as “handicapped.” Avoiding labels encompasses not just a new way of speaking, but also a new way of thinking about people. Wright (18) was a proponent of giving people dignity by thinking of them as people, rather than as diseases or disabilities. She wrote about the “subtle, unrecognized devaluation” of humans that occurs when the person is not put at the forefront (18).

In the language of diabetes care, we often hear the disease first. Many people are referred to as “diabetics,” despite continued conversations about stopping this practice (19). Fleitas (20) wrote about labels placing children “in danger of being identified primarily as conditions, and only secondarily as children.” The same can be said for people with diabetes of all ages. Adults with diabetes say that diabetes does not define them (21), yet they often refer to themselves as “diabetics.” After all, this is what they hear all around them. Professional journals have guidelines that do not allow “diabetic” to be used as a noun (22,23), but do allow its use as an adjective. But if the disease precedes the subject (i.e., “diabetic women” or “diabetic child”), listeners or readers think of the person as diabetes first and person second (20). Alternatives to “diabetic” that focus on the person would include simply saying “person with diabetes” or “child who has diabetes” or “adult living with diabetes.”

In addition to describing people, “diabetic” is often used to describe complications: “diabetic ketoacidosis,” “diabetic retinopathy,” and even “diabetic foot.” In reality, there is more than one cause of retinopathy, neuropathy, and nephropathy. Therefore, an alternative would be to use “diabetes-related” before complications. Focusing language on physiology can change the message people with diabetes hear by taking away judgment. As person-centered, or patient-centered, care in diabetes is becoming more widespread (24), language that puts the person first is the next logical step in providing truly patient-centered care.

“Compliant,” “Control,” and “Fail”
“Compliant” means doing what someone else wants. In the acute care model, this was based on someone being sick or injured, being told what to do to get better, and “complying” with those orders. As others have indicated, the language of the acute care model does not fit in chronic care (3). People with diabetes take care of themselves; HCPs provide information, education, and support, but they do not go home and manage diabetes or even oversee its management.

Diabetes is managed by the individual and is, therefore, the individual’s responsibility (3) and choice. As such, it is up to people to decide what they are capable of and willing to do to manage their disease. This is not compliance; it is self-management. Anderson and Funnell (3) explain that the problem with the “compliance model” is that HCPs feel responsible for patient outcomes. HCPs can start by recognizing that it is not in our control to ensure that patients engage in self-care. Using language that reflects that approach can benefit patients and providers alike by relinquishing control and eliminating guilt.

Spieght et al. (17) explain that words such as “compliant” describe the person, not the behavior. Despite the tendency to use these terms in speaking and writing about people—rather than to them—people with diabetes are still aware that they are being used (7,8), and the attitude that accompanies the use of words such as “compliant” can still be conveyed when speaking directly to people with diabetes. Spieght et al. (17) discussed the attitudes that can be revealed when HCPs call people “noncompliant”:

- Regards the person with diabetes as a passive and submissive recipient of care, who should follow the prescriptions of health professionals or services
- Defines the person as “weak-willed” or “difficult”
- Dismisses the challenges the person with diabetes faces
- Disregards valid choices people make or the complex emotions they may experience

In addition to “noncompliant,” people with diabetes have been called “recalcitrant” if they do not do enough, or “neurotic,” if they do more than what their HCP deems appropriate.

Another term that is inappropriate for people with diabetes, but has long been used to describe diabetes management and blood glucose levels, is “control.” Definitions of the word “control” include:

1. To direct the behavior of (a person or animal); to cause (a person or animal) to do what you want
2. To have power over (something)
3. To direct the actions or function of (something); to cause (something) to act or function in a certain way (25)

“Control” is used in research, for example, when the investigator controls certain variables. People with diabetes, however, actually may not be in control of many aspects of their condition and its management. In addition, several outside factors such as finances, support, access to health care, and other constraints may take control away from people. Therefore, “poor control” (or “unacceptable” or “imperfect” control), when used to describe unhealthy or unsafe blood glucose levels, ends up being a judgmental statement. People who hear they have “poor control” may feel like they are not good enough. They may interpret this as being “out of control” or having no control over their life in general. There is an element of being chastised or even scolded for not being “in control.”

The Australian Centre for Behavioral Research, Diabetes Australia, has pioneered a position statement on
language for diabetes (17). In this document, the organization provides a list of words to avoid and suggestions for replacement language. Its explanation for avoiding “control” is as follows:

The idea of controlling blood glucose levels is great in theory, as few people would want to be “out of control.” However, assuming that true “control” can be achieved dismisses the fact that blood glucose levels are influenced by many factors outside of the person’s direct control (e.g., hormones, illness, stress, prolonged/delayed effects of physical activity, other medications). Continually striving to “achieve control” or “maintain control” is ultimately a recipe for feelings of guilt, despair, and frustration when it cannot be achieved. Instead, we need to acknowledge that blood glucose levels can be influenced by the person with diabetes but not expect that they can ever be truly “controlled.” (17)

To reiterate, discussing blood glucose levels that are not within a certain range as “poor control,” just like calling someone “noncompliant,” is a judgment on the person, not an assessment (26). Hoover (6) explains from a patient perspective that what HCPs consider “the noncompliant patient” could actually be someone who is unconvinced or unmotivated to follow prescribed advice. An alternative to using the word “control” is to make neutral statements about physiology (e.g., “elevated blood glucose levels” or “blood glucose levels outside the goal range”). Instead of aiming for “control,” people with diabetes can “manage” their disease, make choices, and strive for healthy/safe/optimal blood glucose levels.

The physiological processes involved in diabetes make it very difficult for people to have complete control over the disease or their bodies. To be labeled “uncontrolled” is upsetting, especially to those who are doing what is in their control to keep their A1C level within the target range. Even for those whose A1C is not within the recommended range, being called “uncontrolled,” “poorly controlled,” or “out of control” is a judgment and does nothing to help such people achieve healthier outcomes. Patients may not have the confidence to say something when they hear these words. Even worse, some people may simply walk away and think, “Why bother?” The time has come to take a closer look at the language used in diabetes care and to make a change.

Another common use of “control” in diabetes care is the term “glycemic control.” This term is meant to represent blood glucose levels or A1C values; therefore, it can be replaced with alternative terms that do not impart judgment. For example, “The medication is helping him to achieve less glucose variability.” Another way to say or write this might be, “The medication is helping him to achieve lower blood glucose levels,” or even “...a lower A1C level.” On the other hand, with patients who are struggling to achieve their goals, HCPs could say, “The medication is not helping achieve/maintain blood glucose levels within the target range.”

A database search (conducted on 3 December 2014) revealed that words such as “compliance” and “control” are still very present in the diabetes health care literature (Table 1). Despite a growing discussion of the potential negative impact of judgmental language, such language is still prevalent in the professional community. This type of language is part of the clinical context for HCPs; it is what they learn in school and what they hear and read every day. The words used in diabetes care are part of the culture of health care and even of society at large.

Another term that is commonly used by HCPs is “failed,” as in, “She failed on oral medications, so we’re starting insulin.” An important point in diabetes care is that people with diabetes do not fail medications; medications fail them (27). The words “fail,” “failure,” “failed,” and “failing” are not appropriate or helpful in relation to managing diabetes. There is no reason to judge people by calling them a failure. It is even possible that the HCP in a given situation “failed” to make a realistic or effective suggestion for the management plan. Regardless, if one medication is not working, try something else.

**Effect of Words on Health**

Research to date is lacking on the effect of words on diabetes management behaviors and health outcomes. However, many studies have looked at the effect of words on other health states. Wang et al. (28) found that negative words induced anxiety and worry in postoperative patients. People who heard negative words had higher pain scores and secreted higher levels of cortisol, a stress hormone. A study of the effect of verbal styles showed that young drinkers consumed significantly more beer after hearing negative affect words, such as “anxious” (29). A study of the effect of negative words on pain during venous blood draws, participants reported significantly more pain after hearing negative words such as “sting” or “beware” (30).

Puhl et al. (31) investigated perceptions of weight-related language used by HCPs. They reported that people least liked the terms “morbidly obese,” “obese,” and “fat” and found them the most stigmatizing. People may respond to these terms by feeling bad about themselves, continuing unhealthy behaviors, and not returning for health care appointments. Weight stigma and the words associated with it can helpfully promote the adoption of language recommendations (33). Resources are available at [http://www.obesity](http://www.obesity).
Negative words can trigger a stress response, which is activated by the hypothalamic-pituitary-adrenal (HPA) axis. The HPA axis releases corticosteroids, which are hormones that can lead to elevated blood glucose levels (34,35). Stress hormones also have anti-inflammatory and immune-suppressive properties. Although in some disease treatment this is beneficial, for people with diabetes, it has the opposite effect. Stress can lead to high blood glucose levels, inflammation, and diminished protection from the immune system (34,35). Elevated blood glucose levels also contribute to inflammation, increased risk of infection, and decreased wound healing; thus, by contributing to stress in people with diabetes, negative words potentially can exacerbate an already unhealthy situation.

Language as Context
Fisher (36) discussed the role of context in health, stating, “Our behavior reflects our contexts.” There is an emerging focus on context in diabetes care (37), yet thus far, diabetes-related words have not been included in that discussion. Language is part of the human context (38), and humans interpret language unconsciously. Fleischman (39) wrote that “Words are inseparable from the concepts they refer to.” In addition to health-related encounters, diabetes accompanies people in their social, work, and home life. The words people use in each of these contexts can have an impact. Marrero et al. (37) suggest that looking at context can help HCPs identify more effective approaches to engaging people and helping them lead healthier lives.

Regardless of whether words trigger an acute stress response in individuals with diabetes, negative or judgmental terms may contribute to diabetes distress. Diabetes distress is an “emotional response to a demanding health-related condition. [It] includes a broad range of emotional experiences and is defined by the context of diabetes and its management” (40). Diabetes distress has been directly connected with diminished self-care and elevated A1C (41–44). Research supports addressing diabetes distress by identifying interventions that either manage or eliminate this condition (40,45,46). Results of the REDEEM (Reducing Distress and Enhancing Effective Management) study showed that diabetes distress is “malleable and highly responsive to intervention” (47). In fact, these researchers suggested finding minimal, cost-effective approaches to reducing diabetes distress and improving diabetes management. One of those approaches could be changing the language used in diabetes care.

In health care, language is not necessarily blatantly or purposely abusive, and it is likely that HCPs have no idea how their words can hurt. There may be a parallel between this unconscious use of hurtful language and racial microaggressions in clinical practice. Sue et al. (48) define racial microaggressions as “brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults toward people of color.” He discusses the importance of recognizing and addressing these microaggressions in health care.

### Table 1: Number of Articles Using Specific Words by Database and Date

| Search Terms | Database | All Dates | Past 10 Years | 2014 |
|--------------|----------|-----------|---------------|------|
| “Compliance” + “Diabetes” (including all variations of “compliant” and “compliance”) | MEDLINE | 6,350 | 3,784 | 295 |
| | CINAHL | 2,834 | 1,087 | 178 |
| | ProQuest* | 43,910 | 33,978 | 4,193 |
| “Poor Control” + “Diabetes” | MEDLINE | 3,831 | 2,220 | 266 |
| | CINAHL | 721 | 545 | 39 |
| | ProQuest* | 87,561 | 69,834 | 8,917 |
| “Poor Control” + “Glucose” | MEDLINE | 2,092 | 1,177 | 112 |
| | CINAHL | 320 | 250 | 14 |
| | ProQuest* | 61,653 | 49,583 | 6,328 |
| “Poor Control” + “Blood Glucose” | MEDLINE | 1,674 | 895 | 62 |
| | CINAHL | 233 | 185 | 9 |
| | ProQuest* | 46,049 | 36,429 | 4,537 |
| “Poor Control” + “Glycemic” | MEDLINE | 1,674 | 1,176 | 166 |
| | CINAHL | 514 | 385 | 28 |
| | ProQuest* | 14,094 | 11,238 | 1,408 |

*Peer-reviewed.

CINAHL, Cumulative Index to Nursing and Allied Health Literature; ProQuest, ProQuest Research Library.
of teaching clinicians about this phenomenon so they can identify and change their practice, because “all forms of microaggressions have detrimental consequences.” Fleischman’s work (39) attempts to “shed light on the (often unconscious) meanings and metamessages tucked away in the recesses of [health-related] language.” She writes that people who experience health conditions develop a heightened sensitivity to the distinctions in words and that they become “critically aware of the subtle ways in which lexical choices define you as a person.” Words can serve as one of the constant reminders that there are no breaks from diabetes.

Although words are the outward signs of thoughts and attitudes, tone and body language also can impart messages of judgment and blame (49). Communication also includes touch, eye contact, and inflection (20). What facial expressions do HCPs wear when they are thinking “noncompliant patient?” Jargon is another form of language used by HCPs that has been discussed in the literature. Fleitas (20) explains that when HCPs translate jargon into less obscure words, understanding is enhanced. Improved understanding could lead to improved diabetes management, which might eliminate the perceived need for judgment.

**Changing Words and Attitudes**

Thorne et al. (50) highlight the effect of communication in cancer care. Over time, certain types of cancer have become more of a chronic disease and in some ways can now be compared to diabetes. The authors discuss the role of effective communication in optimizing quality of life and care for patients and the negative health consequences that can ensue from poor communication. The only way to truly see a paradigm shift in the language used in diabetes care is for a change in beliefs and attitude to take place. HCPs can both “walk the walk” and “talk the talk.” They can avoid judgmental words when speaking directly to people with diabetes, when talking about them, and when writing about them. Once HCPs view people with diabetes as equals in the patient-provider relationship, the concept of “compliance” will recede (3,4).

A lack of research on the effect of language on people with diabetes may contribute to the lack of awareness or change. Sue et al. (48) report that researchers continue to neglect to study microaggressions. In diabetes, despite research on empowerment and motivational interviewing, there are no studies on words and diabetes. Speight et al. (17) raise the question: how can HCPs provide better support for people with diabetes? Becoming aware of language and changing the words used with people who have diabetes may be an important part of realizing this goal.

The first step is for HCPs to be open to the possibility that words can hurt. When Holmes-Truscott and Speight (51) suggested that terminology used in a diabetes article implied blame being placed on people with diabetes, the authors of the original article dismissed their complaints as “political correctness” (52). Rather than considering the possibility and taking responsibility for language having an impact on health, they called people with diabetes “irrational.” HCPs worry about the time and cost involved with a paradigm shift that would result in different language (10), yet excluding negative words could be a simple and inexpensive way to avoid negative outcomes (30). At first, it may seem to take more time to use nonjudgmental language, but once putting people first and building on their strengths rather than deficits becomes second nature, nonjudgmental language flows smoothly, quickly, and easily in conversation and writing.

**Conclusion**

There is a real risk of words leading to negative health outcomes in people with diabetes. Professionals and consumers alike have been discussing this topic for more than three decades, and the time has come to make a change. We know that words associated with pain can increase the perception of pain and that people who have a fear of pain tend to focus on pain-related words (30). Does this translate to other health-related states? Do people with diabetes pay more attention to words like “poor control?” Does hearing those words lead them to perceive themselves as being “out of control” and then to give up on managing their diabetes altogether? According to Benedetti (38), “One of the simplest and most controllable contexts...is represented by words.” Further, he says, a positive context can have a positive effect, and a negative context can produce a negative effect. What if changing the words HCPs use in clinical settings makes a difference in diabetes outcomes? Isn’t it time to find out?

**Duality of Interest**

No potential conflicts of interest relevant to this article were reported.

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