Stigmatization of Repetitive Hand Use in Newspaper Reports of Hand Illness

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Abstract Failure to provide a balanced evidence-based consideration of the role of activity in illness can stigmatize individuals and their activities. We assessed the prevalence of language that stigmatized repetitive hand use and those that use their hand repetitively in newspaper coverage of common hand illnesses. The LexisNexis Academic database was used to search five major US newspapers for articles containing keywords about common hand illnesses during a 3-year period. Article language was assessed for stigmatization of activities involving repetitive hand use as well as for stigmatization of patients who use their hand repetitively. One hundred and twenty-four articles on hand illnesses were identified. Of these, 65.3% of articles stigmatized activities involving repetitive hand use, including 96.6% of articles discussing overuse injury of the hand, 90% of articles discussing tendonitis or tenosynovitis, and 51.8% of articles discussing carpal tunnel syndrome. Patient stigmatization was documented in 30.6% of the newspaper articles. Stigmatizing statements were most commonly made by journalists (94.8%), followed by patients (3.1%), and physicians (2.1%). Language that stigmatizes repetitive hand use and patients who use their hand repetitively is prevalent among US newspaper articles. Both health professionals and journalists reporting health-related news should be more sensitive to the use of stigmatizing language and provide a more balanced, measured, and evidenced-based account of hand illnesses.

Keywords Health information · Repetitive hand use · Hand illness

Introduction

A survey conducted by the Centers for Disease Control and Prevention found that people look to newspapers and magazines as sources of health information more often than family, friends, physicians, and nurses combined (78 vs 71%) [1]. Unfortunately, previous studies have demonstrated inaccurate or incomplete reporting of medical information in newspaper articles [11, 14, 16] and web sites [17]. In addition to presenting misinformation on medical topics, the news media has the potential to stigmatize individuals or activities by creating or reinforcing negative perceptions and beliefs.

The Oxford English Dictionary defines stigma as “a distinguishing mark or characteristic of a bad or objectionable kind” [13]. Dictionary.com (www.dictionary.com) defines stigma as “a mark of disgrace or infamy; a stain or reproach, as on one’s reputation”, and stigmatization as, “to set some mark of disgrace or infamy upon”. Renowned sociologist Erving Goffman defined stigma as the “situation of the individual who is disqualified from full social acceptance” [4]. Illnesses that affect an individual’s appearance or physical activities are readily noticeable by the public, and therefore, particularly susceptible to stigmatization. The negative affects of such stigmatization on quality of life have been documented in the dermatological literature [12, 24, 25]. Moreover, the role of the news media in creating and propagating stigmatization of individuals has been demonstrated in the neurological and psychiatric literature [2, 7, 18].

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The concept that repetitive hand use can lead to hand injury is prevalent but lacks scientific support. Failure to provide a balanced scientific consideration of the role of activity in illness can stigmatize individuals and their activities. Such stigmatization can increase illness as exemplified in the recent Australian epidemic of so-called “repetitive strain injury” [6, 9, 21].

In this study, we audited newspaper coverage of common hand illnesses to assess the prevalence of language that stigmatizes repetitive hand use and the patients that engage in repetitive hand use.

Materials and Methods

Using the LexisNexis Academic database (LexisNexis Group, Dayton, OH), we searched five major US newspapers (Daily News, New York Times, USA TODAY, Wall Street Journal, and Washington Post) between August 15, 2003 and August 15, 2006 for articles containing one or more of the following key words: carpal tunnel syndrome, DeQuervain, tendonitis, tenosynovitis, trigger finger, repetitive strain/injury/motion, and overuse injury. Obituaries, editorials, letters to the editor, and calendar events were excluded. We grouped the 124 articles satisfying the inclusion and exclusion criteria into one of three groups: carpal tunnel syndrome, tendonitis/tenosynovitis (including DeQuervain and trigger finger), and overuse injury of the hand (including repetitive strain/injury/motion and overuse injury).

The articles were independently analyzed and coded by two healthcare professionals. After performing, an interobserver reliability analysis for consistency in coding, the coders re-reviewed and discussed any differences in classification until discrepancies were resolved. Article language was assessed for both stigmatization of the patient and stigmatization of the activity. Patient stigmatization was defined according to the “spoiled identity” definition provided by sociologist Erving Goffman. Goffman defined stigma as the “situation of the individual who is disqualified from full social acceptance” [4]. We classified language suggesting a less socially desirable identity due to repetitive hand use as patient stigmatization. Examples of patient stigmatization include language stating that the patient’s “life collapsed” and that the patient was “forced to retire” as a direct result of repetitive hand use.

Activity stigmatization was defined as language suggesting that a specific activity directly or indirectly leads to arm-related illness. For example, the statement that computer use causes carpal tunnel syndrome. Both patient and activity stigmatization were classified without regard to the accuracy of the language.

We categorized the articles as news or features articles. News articles were defined as those articles reporting objective

information about a person or event, while feature articles were defined as longer, more probing articles on a topic of interest, often written in a more conversational tone. We also recorded whether the article mentioned pertinent disorder-specific health information regarding risk factors, symptoms, and treatment. The specific type of risk factors discussed were also noted. Furthermore, the articles were classified according to whether the main topic of the article was the hand illness as well as whether the article was describing a hand illness of a celebrity.

Before resolving differences between the coders, interobserver reliability testing was performed using a Kappa interobserver reliability score. In addition, levels of agreement were determined according to the Landis and Koch benchmarks for clinical agreement [8]. The association between categorical variables was assessed by chi-squared test and Fisher’s exact test. $P < 0.05$ was considered significant. Statistical analysis of the data was performed using SPSS Version 14 for Windows (SPSS, Chicago, IL).

Results

The interobserver reliability was substantial for coding of stigmatizing activities ($\kappa = 0.93$, $p < 0.001$) and very strong for coding of patient stigmatization ($\kappa = 0.864$, $p < 0.001$) [8]. The greatest number of articles was retrieved from the Washington Post (43 articles, 34.7%), followed by the New York Times (41 articles, 33.1%), the Daily News (15 articles, 12.1%), the Wall Street Journal (14 articles, 11.3%), and USA TODAY (11 articles, 8.9%). Carpal tunnel syndrome had the highest frequency of coverage with 85 stories (68.5%), followed by overuse injury of the hand (29 stories, 23.4%) and tendonitis/tenosynovitis (10 stories, 8.1%).

Patient stigmatization was documented in 30.6% of the newspaper articles (Table 1). Articles discussing tendonitis had the highest rate of patient stigmatization (60.0%), followed by carpal tunnel syndrome (28.2%) and overuse injury of the hand (27.6%).

Activity stigmatization was documented in 65.3% of all articles and was found to vary depending upon the specific disorder ($\chi^2 = 22.1$, $p < 0.001$; Table 1). Activity stigmatization was found in 96.6% of articles discussing overuse injury of the hand, 90% of articles discussing tendonitis, and 51.8% of articles discussing carpal tunnel syndrome. The activities most frequently stigmatized were typing (22 articles), factory work (16 articles), and sports (14 articles).

News stories accounted for the majority of articles (60.5%), and the percentage of activity and patient stigmatization in news stories was 64.0 and 28.0%, respectively. Feature articles (39.5% of total) were also found to more frequently contain activity stigmatization

Table 1 Characterization of stigmatization language in newspaper articles.

	% (n/total articles)
Patient stigmatization	30.6 (38/124)
Overuse injury of the hand	27.6 (8/29)
Tendonitis/tenosynovitis	60.0 (6/10)
Carpal tunnel syndrome	28.2 (24/85)
Activity stigmatization	65.3 (81/124)
Overuse injury of the hand	96.6 (28/29)
Tendonitis/tenosynovitis	90.0 (9/10)
Carpal tunnel syndrome	51.8 (44/85)
Source of stigmatizing language	
Journalists	94.8 (91/96)
Patients	3.1 (3/96)
Physicians	2.1 (2/96)

(67.3%) than patient stigmatization (34.7%). Of the stories in which stigmatizing language was found, the stigmatizing statements were most commonly made by journalists (94.8%) followed by patients (3.1%) and physicians (2.1%; Table 1). There were no significant differences in the rates of activity or patient stigmatization among the five newspapers.

Articles discussing hand illnesses of celebrity subjects contained significantly greater amount of patient stigmatization (58.3%) compared to articles that did not focus on celebrities (27.7%; $p=0.035$). Moreover, an increased use of stigmatizing language was found in articles in which the hand illness was not the main topic of the article ($p=0.028$).

Risk factors were discussed in 37.1% of the articles, and these articles were very strongly associated with a higher frequency of activity stigmatization (89.1%) compared to articles not discussing risk factors (10.9%; $\chi^2=18.3$, $p<0.001$). In addition, the rates of activity stigmatization varied according to the type of risk factor discussed ($\chi^2=28.1$, $p<0.001$). All of the articles ($n=18$) discussing sports as a risk factor contained activity stigmatization. Similarly, 96.3% of the articles discussing occupational risk factors and 84.4% of the articles discussing repetitive strain contained language that stigmatized these activities. Only three articles mentioned biological risk factors (for instance, the strong genetic risk of carpal tunnel syndrome), and none of these articles contained activity or patient stigmatization. Symptoms and treatment options were both discussed in only 22.6% of the articles.

Discussion

Prior work has established the prevalence of stigmatizing language in newspaper coverage of neurological conditions and psychiatric disorders [2, 7, 18]. The authors of these

studies urged news reporters to exercise caution, given their power to influence and shape readers' illness concepts and societal attitudes toward patients with these illnesses. A study by Caspermeyer et al. [2] documented a substantial prevalence of both stigmatizing language (21%) and inaccurate medical information (20%) in newspaper articles addressing neurological conditions. Likewise, an evaluation of the accuracy of the print media's coverage of epilepsy revealed gross errors in 31% of articles as well as stigmatizing labeling of patients as "epileptics" in 45% of articles [7]. To address the high level of stigmatization and misinformation in the reporting of psychiatric disorders, the World Psychiatric Association has even attempted anti-stigma interventions by supplying reporters with accurate content and more positive story lines. These efforts, however, have had mixed results, with the percentage of negative stories actually increasing in the post-intervention period [18].

In spite of a dearth of scientific support relating hand use to hand injury, language that stigmatizes repetitive hand use and patients that use their hand repetitively is prevalent in newspaper articles. The vast majority of stigmatizing language is attributable to the journalist and not to any experts or source material. Until additional research is performed, one can only speculate regarding the tendency of journalists to use stigmatizing language; however, two important factors would seem to be the human tendency to try to explain and control illness (strong pattern-forming tendencies [3]) and the fact that "bad news sells" [10, 23]. Health professionals can also be implicated.

Health professionals often stigmatize repetitive hand use beyond what is merited by scientific evidence. Diagnostic terms such as "repetitive strain injury", "overuse syndrome", and "cumulative trauma disorder" are inherently stigmatizing and of questionable scientific validity [19–22]. Such concepts are by no means new. Nonspecific, medically unexplained work or activity-related pain was referred to as "writer's cramp" before the widespread use of typewriters and computers [5, 15]. The potential impact of such stigmatizing language has long been apparent, but was impressive and undeniable in the Australian epidemic of work-related arm illness precipitated by promotion of the stigmatizing illness concept "repetitive strain injury" [6, 9, 21]. As the majority of activity-related arm pains remain poorly understood and idiopathic, more neutral illness concepts such as nonspecific, medically unexplained, or idiopathic arm pain seem preferable.

Health professionals should be mindful of the potential impact of negative or stigmatizing language. It is our responsibility to promote the most positive, optimistic, practical and enabling illness concepts consistent with scientific evidence. Journalists have the same responsibility. As patients increasingly turn to the Internet as a source of

healthcare information, this venue potentially provides an additional source of stigmatization that should be further evaluated. Negativity and stigmatization risk increasing illness burden. Sensitivity to and avoidance of stigmatizing language should be cultivated by both health professionals and journalists reporting health or health-related news.

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