



**Content Analysis of
Risk/Benefit Communication
in a Metropolitan Daily Newspaper's
Sunday HEALTH Section,
for Use of Marijuana**

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Executive Summary

The public, medical professions, and policy makers in the United States have had a range of attitudes toward the use of marijuana/cannabis. The Federal regulatory stance in the US classifies the substance as having a high potential for abuse with no medicinal value. However, since the mid-1990s, marijuana has caught favor for having medicinal value and more and more states are considering legalizing its recreational use. It is fair to ask that if we continue to normalize marijuana, could it lead to the next major public health problem for America? The purpose of this descriptive study was to conduct a content analysis of articles printed in a “HEALTH” section of a metropolitan daily newspaper to determine the extent and nature of coverage given to its medical or recreational use, for its readers. An 8-year and 5-month review of all articles published found a dearth of coverage of the health risks or benefits of marijuana use. Only 4.5% of all issues published, and a paltry less than one-half of one percent of all articles addressed this health issue. Overall, readers in this fourth media market in the US are not receiving relevant, robust, and timely information about marijuana/cannabis use; there are many gaps. It is peculiar that healthcare and public health professionals and groups have not voiced concern about a substance that is gaining favor for wide use in the US, when evidence for its health risks and benefits of use, medicinal or recreational, is still elusive.

Background and Rationale for This Study

The medical profession, the public, and policy makers in the US have had a range of attitudes toward the use of marijuana/cannabis.

The public officials’ stance in the US still categorizes marijuana use as a substance with high potential for abuse with no medicinal value; it is officially a Schedule I substance. However, since the mid-1990s, use of marijuana/cannabis has caught favor among some health care providers and patients for having medicinal value for those seriously ill with a disease or condition.

Furthermore, cannabis is now becoming decriminalized and legal (“normalized”) for “recreational use,” by one-quarter of the states.

Public opinion polls show a majority of adults surveyed approve of medical marijuana and a growing number is “OK” with recreational use by adults; however,

No medical authority organization or public health authority agency has formally approved use of cannabis as having significant medical value and without risk when used recreationally.

Little has been done to measure public knowledge of what is known about the health risks to cannabis use.

It is fair to ask that if we continue to normalize marijuana could it lead to the next major public health problem for America?

Purpose of This Study

The purpose of this descriptive study was to conduct a **content analysis** of articles printed in a weekly “HEALTH” section of a major metropolitan newspaper to determine:

- The **extent of coverage** given to the medical use or recreational use of marijuana/cannabis.
- The **nature of health risk or benefits** communicated to the reader via the printed articles (negative, positive, or neutral); and

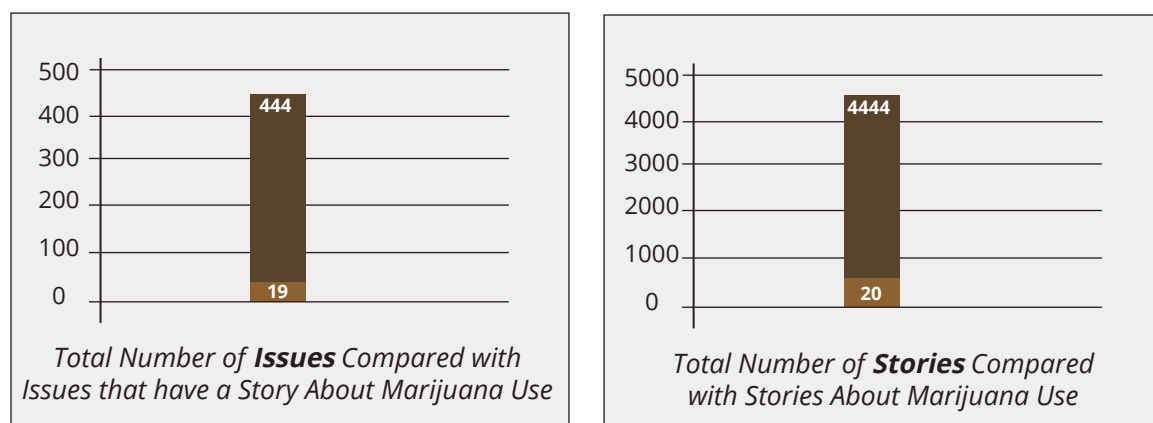
- **Profiles** of those asked to **comment** on or information the writer used from “**authorities**” or **spokespersons** who opined on the use of marijuana/cannabis, in these articles.

Findings from this study should assist healthcare and public health communication professionals and groups assess the level of attention given to the risks of marijuana use, as noted by credible health organizations, and the nature of the messages communicated, i.e. what types of risks and what types of potential benefits are offered. Furthermore, findings from the study should allow one to judge if the amount of health news given to the public is commensurate to the major public policy shifts in making medical marijuana legal and the subsequent move to normalize recreational marijuana across the states.

Method of Review

- The *Philadelphia Inquirer* was the medium chosen to analyze the risk/benefit communication for use of marijuana/cannabis given it is a reliable, consistent, and robust source of print health news and commentary consumed by the public in a major metropolitan area in the U.S.—the *Inquirer* is one of the top 20 newspapers in the US and publishes in this country’s fourth largest media market.
- Specifically, we conducted a content analysis of the HEALTH section of this paper, which began issues each Sunday since 5 May 2013.
- To qualify for review regarding the nature of health risk or benefits of use, an article had to be substantively oriented toward marijuana/cannabis use in its content.
- *The Philadelphia Inquirer* published 444 Health issues during the eight-year and five-month period of this study (May 2013 to October 2021)—one each Sunday.
- We read and carefully reviewed the content in all **444 “HEALTH” section issues published, identifying 19 issues with a total of 20 stories about marijuana use.** Furthermore, the total number of stories published was **4,444**, thus showing the **percentage of stories** in this 8-year and 6 month study related to marijuana use was 0.45 or **less than one-half of 1%**. (See *Figure 1*).

Figure 1: Extent of Articles Published About Use of Marijuana in a Health Section of *The Philadelphia Inquirer* for 8 Years and 5 Months.



- The second phase of the close read and review of all issues had three sets of constructs. One was to **identify constructs** in which to pinpoint the **nature of the content** (*headlines and article narrative*) in the 20 articles having some substantive treatment of marijuana/

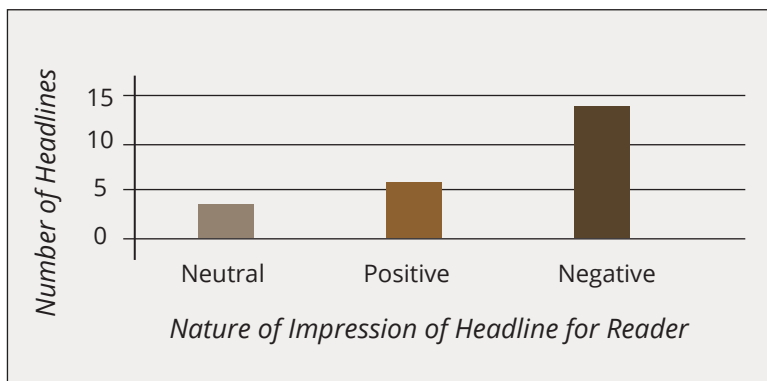
cannabis use. These constructs were: article number, article date, author of article, type of article (e.g. column, news staff generated article) headline and sub headline, and the **nature of headlines** (i.e. *positive, negative, neutral*).

- A second review used the following constructs to assess the **narrative** in the articles: the Nature of Health Risk-Related Consequences, the Nature of Medical Marijuana Use, the Nature of Socio-Cultural Aspects, the Nature of Economic Aspects, the Nature of Public Policy Measures, the Nature of Additional Research Needed, and the Overall Nature of the Content of the copy in the article. Each construct was **assigned an overall impression** of either ***positive, negative, or neutral*** for behavioral health consumer communication.
- A third set of constructs included general profiles of **who commented on the health risk/benefit of marijuana use; affiliation** of the individual commenting, i.e. administrative official, advocacy group, medical/health group, or the author; and the individual's **sector**, i.e. government, for-profit, or nonprofit.

Findings

Headlines: Since the Headline is the lead indicator for the subject of an article for the reader (positive, negative, etc.) and a significant number of newspaper readers “headline read,” we reviewed the headlines and categorized them as either *positive, negative, or neutral* toward marijuana/cannabis use. Regarding the 20 headlines, three (3) were neutral in nature, five (5) gave positive impressions, and 12 gave negative impressions. (See Figure 2).

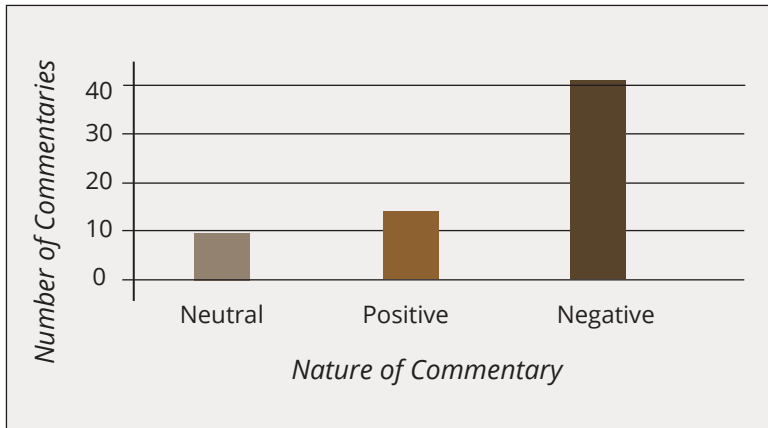
Figure 2: Impression Given by Headlines of Articles in a Metro Newspaper’s Weekly HEALTH Section.



Nature of Commentary Given by Principles Quoted in Articles: (positive, negative, neutral):

The 20 articles reviewed featured 53 individuals of varying backgrounds and professions providing insight related to research, clinical care, public policy, normalizing, and lived experiences involving marijuana use. In analyzing the five established constructs, namely each commentator’s insights on the nature of marijuana use in relation to its medicinal purposes, socio-cultural aspects, economic aspects, public policy implications, as well as conclusions that more research was needed, **each commentator** was categorized as explicating an **overall impression in the article as positive, negative, or neutral**. Of the 53 identified commentators in this study, 8 gave neutral commentary, 12 gave positive commentary, and 33 gave negative commentary generally about the use of marijuana/cannabis. (See Figure 3).

Figure 3: Generalized Nature of Content by Principals Quoted in Articles Published in a Sunday’s HEALTH Section of a Metro Newspaper.



- Neutral commentary generally focused on the need for enhanced research relating to the efficacy of marijuana use for medicinal purposes, often taking a cautiously optimistic tone.
- Positive commentary stemmed largely from individuals citing marijuana use for medicinal purposes.
- Negative commentary cited detrimental psycho-social and physical consequences of marijuana use, particularly among young people. Additionally, medical professionals across the board argued strongly against the use of marijuana by women who are pregnant or breast feeding.

In a close review of the content of these articles, we see several areas addressed. These five areas included:

- advocacy for medicinal purposes;
- concerns related to underage use effecting development;
- induction of Cannabinoid Hyperemesis Syndrome (CHS);
- concerns over fetal/early childhood development;
- as well as the creation of an “other” category for three articles that were not well associated with any of the pre-determined categories

Profiles of the Commentators Quoted in Printed Articles: Journalists in writing articles on this topic naturally seek comments from a range of medical experts, policymakers, patients, advocacy groups, and other stakeholders about marijuana use. Of the 53 commentators in the 20 articles, 7 were the primary author. Ten (10) of the commentators of the 53 were from government entities, including those holding elected office, such as former PA Governor Tom Corbett; those representing public universities, and one commentator from a VA Hospital. Thirty-two (32) commentators were from the nonprofit sector, including individuals representing non-profit hospitals, universities, and professional healthcare associations. Finally, four (4) individuals represented the private sector, largely made-up of advocacy groups as well as one for-profit drug treatment center.

Discussion and Implications

It is odd that at the time of this study 36 states and four territories approved of marijuana for some type of medicinal use, as well as 16 states and D.C. allowing the normalized growing,

processing, and sale of marijuana for “recreational” use by adults, in spite of the federal government continually classifying marijuana as a Schedule I substance, i.e. no medicinal value and having health risk concerns.

Research regarding medical marijuana’s ability to meet the principles of high-quality patient care, much less its lasting health effects for recreational use, is still in its infancy.

Given that the health hazards of marijuana use have been tempered by the public and some healthcare researchers and providers, it makes sense that the public should be provided relevant, accurate, robust, and timely health communications about the use of this substance.

In this study, only 19 issues contained articles substantively oriented towards marijuana/cannabis use, among the 444 total issues over the eight years and five months period. It is surprising that only 4.2% of issues included at least one article related to this evolving health behavior issue. Given the number of articles dedicated to each issue (about 10 on average), we found a paltry less than one half of 1% dedicated to discussing the risk/benefits of marijuana use in this multiyear review.

How can it be that a health behavior and health treatment that still has many unknowns about its risks--short and long term-- and “elusive” medicinal value get so little attention in a major metropolitan newspaper’s special health communication section?

It is certainly positive that when the marijuana use issue is addressed in this health section, the overall impressions by 53 commentators communicated in the 20 articles that wrote about marijuana use were negative by almost three-fold (33 negative to 12 positive). Additionally, given a significant number of readers are headline readers, this study found that over two times as many headlines were negative about the use of marijuana/cannabis.

Commentators representing medical or health groups as well as administrative officials were most cited as providing negative commentary, especially in relation to marijuana use by adolescents and women who are pregnant or breastfeeding. While many commentators concluded that ultimately more research was needed regarding the overall medicinal, socio-cultural, economic, and public policy risks or benefits of marijuana use, there was no evidence in these articles of medical or health professionals calling outright for marijuana legalization on either therapeutic or recreational grounds.

Given the limited extent and scope of coverage for this evolving health behavior issue, there are clearly many gaps in communicating health risks of marijuana use to readers.

Therefore, why is there not more attention to what could be the next public health crisis, i.e., given the potential for addictive behavior and short term and long-term deleterious health effects? This review shows negligible coverage of a health and medical treatment behavior that is far from settled.

As normalization of marijuana for both expanding medicinal use to outright recreational use continues to accelerate across the country, it is reasonable to question why robust public health and healthcare communication campaigns are not evident. Hanging in the balance is the potential for the next major public health problem in the U.S.

**For a copy of this full manuscript replete with references
write to Dr. Stephen F. Gambescia at sfg23@drexel.edu.**