Centrum Multivitamin Content Analysis—Over the Counter—OTC Medicine on Facebook

Euripedes Fernandes de Oliveira Junior ⓘD

Methodist University of São Paulo, São Paulo, Brazil
Email: eu.fernandes2@gmail.com

Abstract

Medicines advertising can be discussed from several perspectives. The study can be directed to its informational content, current legislation, characteristic (persuasive, informative) and the use of euphemisms. In this paper, the authors indicated the values present in the advertising content of the Centrum brand, classified by the World Health Organization (WHO) as Over the Counter—OTC Medicine, based on the content analysis [1] of whose evaluations will be based on advertising objects published on Facebook.

Keywords

Content Analysis, Over the Counter—OTC Medicine, Multivitamins, Digital Social Networks

1. Introduction

The symbology bestowed by medicines, a factor that motivates their consumption, is built through a social, everyday experience, and contact with the various channels of communication, whether online or offline. The affective memory that we build throughout our lives, such as the homemade recipes recommended by our grandmothers and mothers, such as: "Doril took the pain away" or even: "headache? I don't even think I'll call Neosa", are remarkable examples that accompany us and have become timeless. In addition, the popularization of the internet, digital social networks and smartphones transformed these tools into sources of research on diseases and well-being, enhancing reciprocity between people, becoming a great showcase of products, services, and communication platform.

These transformations, calls "o the mediation of everything" [2], are related to the media, and with an increasing integration with social practices, that is, with the way in which people live on their daily lives.

The Over the counter—OTC medicines can be marketed without a prescription, that is, they are medicines available in self-service in pharmacies and drugstores that do not require a medical prescription to be marketed [3].

Research published in 2018 takes a look at the quantitative context relevant to the target audience that uses OTC's and, therefore, self-medicates, showed that in Brazil, 79% of people over 16 years old admit to taking medication without a medical or pharmaceutical prescription. This percentage is the highest since the survey began to be carried out by this institution, where in 2014 76.2% said they self-medicated and in 2016, 72% [4].

In turn, observes that discourse is neither transparent nor neutral, so not all areas of discourse are equally open and attainable [5].

As a result, we are faced with an abundance of discourses arising from new technologies and communication channels, which amuse us, distract us, excite us at the same time having the power to persuade us.

In the discursive perspective, the meaning of the words changes according to their use, and in the utterances the words are submitted to inflections, conjugation, variation of gender and degree, among others.

Bringing Content Analysis to the context of this work, and in order to understand it, defines it as a "set of communication analysis techniques" [1], which includes the rigor of the method as a way of not getting lost in the heterogeneous aspect of its object, also pointing out that it is about:

> systematic and objective procedures for describing the content of messages, indicators (quantitative or not) that allow the inference of knowledge related to the conditions of production/reception (inferred variables) of these messages.[1]

The purpose of the present study is to contribute to the academic discussion, seeking to interrogate established and not necessarily translated meanings.

2. Theoretical Reference

2.1. The Power of Social Networks

The information technology—IT could be compared to what was electricity and the electric motor in the Industrial Age, for its ability to distribute the power of information throughout the domain of human activity and which has contributed to the way in which people relate to each other and to the world, favoring learning, new skills, cognitive ability, and social coexistence that are essential to stay active, especially at older ages [6].

This network encompasses relationships of greater or lesser intensity with the peer group, family, school, community or even with institutions or associations related to sport or leisure, such as music, dance, among others. The so-called "mediatization" helps us to understand the fact that the media occupies a central

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[1]Systematic and objective procedures to describe the content of the messages, indicators (quantitative or not) that allow the inference of knowledge related to the conditions of production/reception (inferred variables) of these messages).

place in everyday experiences [7].

The application and use of digital social networks are the most diverse, among them there is the search for information about symptoms and treatment of the most varied diseases whose answers may be insufficient, ambiguous, or not true, and that can compromise the health of users, leading them to undesirable consequences and the aggravation of a disease, since the inappropriate use of medicines can hide certain symptoms, cause allergic reactions, dependence and even death.

A look by for "mediatization" points to a process by which society to an Increasing degree is subjected to, or becomes dependent on, the media and its logic [8].

Within this same look, "mediatization" results in changes in the development of how things happen when this articulation takes place with the practices of human and social relations [9].

It is fair to infer, therefore, that social networks have been tangibly modifying how consumers use them to seek information about medicines on social networks.

According to research published in (Table 1) Brazil is among the main users in Latin America. We had 78.1 million active monthly users, and who accessed a social network at least once a month in 2014, a number that rose to 86.5 million in 2015 (+10.7%) and reached the middle of 2016 with 93.2 million users (+7.8%) [10].

In second place is Mexico, which jumped from 43.7 million in 2014 to 49.5 million in 2015 (+13.2%) and reaches June 2016 with 56 million active users

Table 1. Social network users in Latin America.

	2014	2015	2016	2017	2018	2019	2020
Social media users (millions)							
Brazil	78.1	86.5	93.2	97.8	101	103	105
Mexico	43.7	49.5	56	61.6	65.9	69.8	72.1
Argentina	19.2	20.8	21.7	22.5	23.3	23.9	24.3
Other	69	81	89.3	95.7	102	108	112
Latin America	210	238	260	278	292	304	314
Social network user growth (% change)							
Mexico	16.7	13.2	13.1	10	7	6	3.3
Brazil	12.5	10.7	7.8	5	2.8	2.4	2.1
Argentina	9.9	8.5	4.2	3.8	3.4	2.6	2
Other	16.2	17.5	10.3	7.3	6.4	5.6	3.9
Latin America	14.3	13.2	9.4	6.8	5	4.3	3

Source: https://canaltech.com.br/redes-sociais/brasil-e-o-pais-que-mais-usa-redes-sociais-na-america-latina-70313/. Accessed on 05/17/2019.

(+13.1%). Finally, Argentina, which had 19.2 million in 2014, went to 20.8 million in 2015 (+8.5%) reaching June 2016 with 21.7 million users (+4.2%), according to this same survey, thus indicating that social networks are widely used and popular in Brazil.

In its Social Media Trends 2018 survey, presented the results with people's usage habits and behavior on social networks, which involved 523 social network users [11].

In general, 95% of the survey respondents use Facebook, 89.1% use Instagram and 11.3% use Snapchat. Daily 38% of users access their social networks spending 4 hours a day browsing these networks. Although they use networks a lot, 31.7% of respondents are thinking about leaving a social network.

From the socioeconomic point of view, 47.4% are men and 52.6% are women. In the age group of the target audience of this study, 15.3% of respondents are 40 years old or older, and 57% of respondents are in the age group between 25 and 39 years old.

In turn, Figure 1 shows us that 57.20% of the social network users are between 25 and 39 years old, with users aged 40 or older being 15.3%.

When crossing the gender variable, it is possible to observe (Table 2) that Instagram is more used among women, with YouTube and Twitter among men, however Facebook is the most used social network by all age groups (except men) up to 24 years.

By age group, it is observed that as age increases, the percentage of those who use Instagram decreases. It is also possible to understand that the use of YouTube
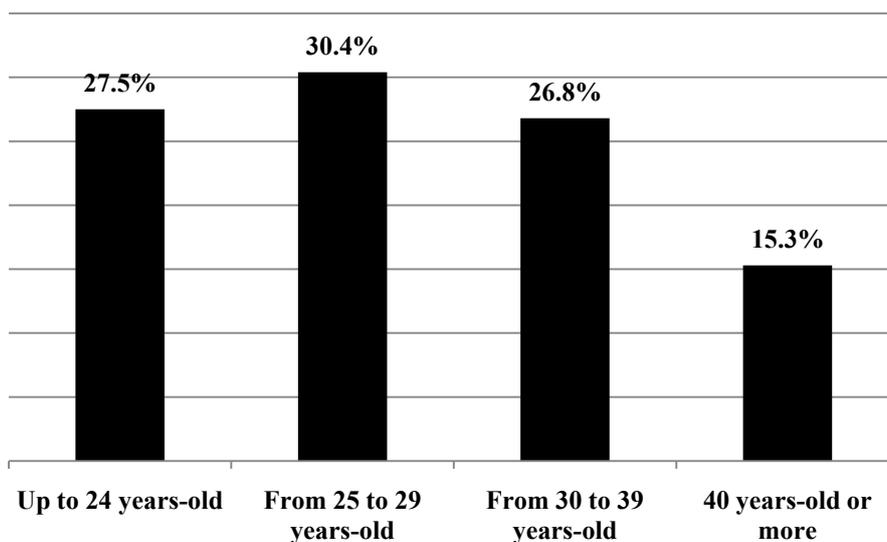

Figure 1. People's habits of use and behavior in social networks. Source: https://cdn2.hubspot.net/hubfs/355484/Ebooks%20MKTC/Social%20Media%20Trends%202018.pdf?t=1542483912554&utm_source=hs_automation&utm_medium=email&utm_content=39460531&_hsenc=p2ANqtzDxh1Jyn_ij4kjeVhXTQ_nUlhQXEJowLW9xGjc7A5F_ctl8q95j0xl3YWk-uwDVFl0lYqLcGPoDLKcycymEKAEeJ8xxw&_hsmi=39460531. Accessed on 05/20/2019. p-66.

Table 2. Crossing by gender variable.

	MEN	WOMEN	UP TO 24 YEARS	FROM 25 TO 29 YEARS	FROM 30 TO 39 YEARS	40 YEARS OR MORE
FACEBOOK	94%	96%	94%	97%	97%	90%
INSTAGRAM	86%	92%	94%	94%	87%	74%
YOUTUBE	73%	66%	77%	66%	71%	59%
LINKEDIN	61%	64%	57%	63%	66%	64%
TWETtER	45%	36%	40%	35%	41%	49%
PINTEREST	29%	50%	42%	42%	40%	31%
GOOGLE+	21%	18%	13%	9%	24%	45%
SNAPCHAT	12%	11%	19%	12%	6%	4%

People's habits of use and behavior in social networks. Source: <https://cdn2.hubspot.net/hubfs/355484/Ebooks%20MKTC/Social%20Media%20Trends%202018.pdf?t=1542483912554&utm_source=hs_automation&utm_medium=email&utm_content=39460531&_hsenc=p2ANqtz_Dxh1Jyn_ij4kjeVhXTQ_nUlhQXEJowLW9xGjc7A5F_ctl8q95j0xl3YWkuwDVFl0lYqLcGPoDLKcycymEKAEeJ8xxw&_hsmi=39460531>. Accessed on 25/05/2019. p-69.

and Pinterest is lower among those over 40 years of age (compared to other age groups). On the other hand, the use of Twitter is higher in this stratum. LinkedIn, in turn, is most used among respondents between the ages of 30 and 39. Finally, Snapchat, reaches about 19% of respondents up to 24 years of age.

Finally, regarding the main interests in social networks, **Figure 2** shows the topics that respondents most follow are information about their profession or area of activity (81%), news in general (59.8%), entertainment (59.8%) and technology (56.7%).

The interest in the health area, the focus of this study, is the third-to-last search preference with 23.5% of the searches.

2.2. Influence of Digital Social Networks in the Search for Medicines

Social networks facilitate the exchange of health information, sharing personal stories that go beyond medical content or chatting with friends and family. What this study has shown is that people are embracing digital social networks, with one in three Americans using an online social network specifically to obtain health information [12].

In this study, it was shown (**Figure 3**) that in terms of online tools that are used to search for health information, 58% are based on the internet (websites, search engines, advertisements, blogs, forums and social networks).

Within this context, there is also self-diagnosis, where information on various diseases, symptoms, prophylaxis, medicines, treatments, and forms of contagion about various diseases is very easy. The website https://www.todabiologia.com/microbiologia/bacterias.htm exemplifies several of these diseases, their symptoms, causes and triggering factors.
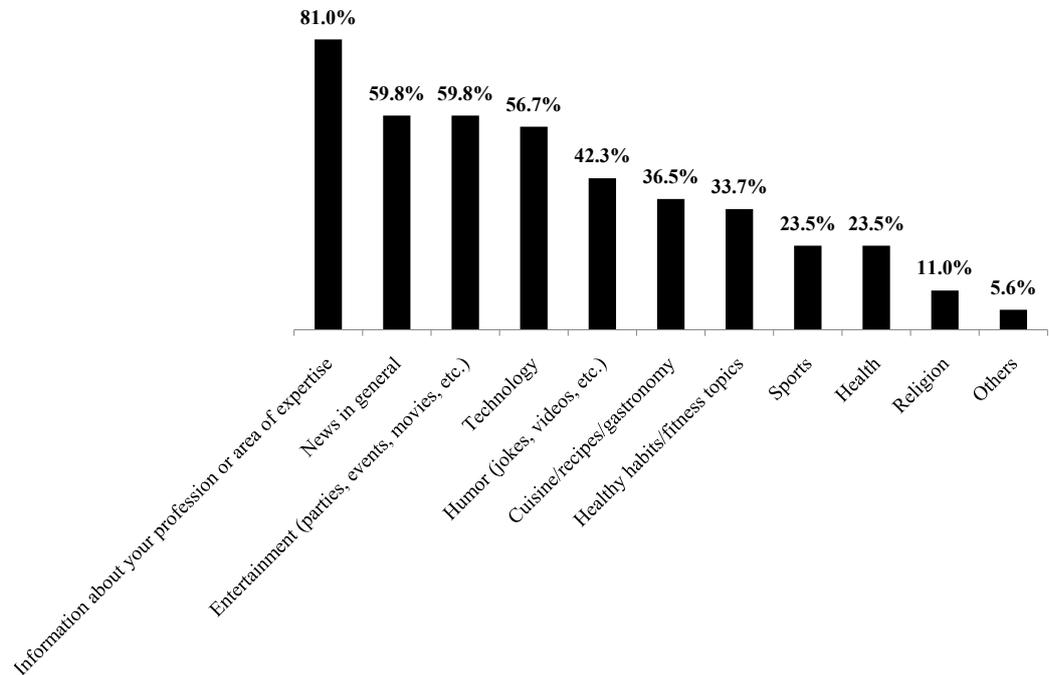
Figure 2. Main interests in social networks. Source:
https://cdn2.hubspot.net/hubfs/355484/Ebooks%20MKTC/Social%20Media%20Trends%202018.pdf?t=1
542483912554&utm_source=hs_automation&utm_medium=email&utm_content=39460531&_hsenc=p2
ANqtz_Dxh1Jyn_ij4kjeVhXTQ_nUlhQXEJowLW9xGjc7A5F_ctl8q95j0xl3YWkuwDVFl0lYqLcGPoDLK
cycymEKAEeJ8xxw&_hsmi=39460531. Accessed on 20/05/2019. p-79.
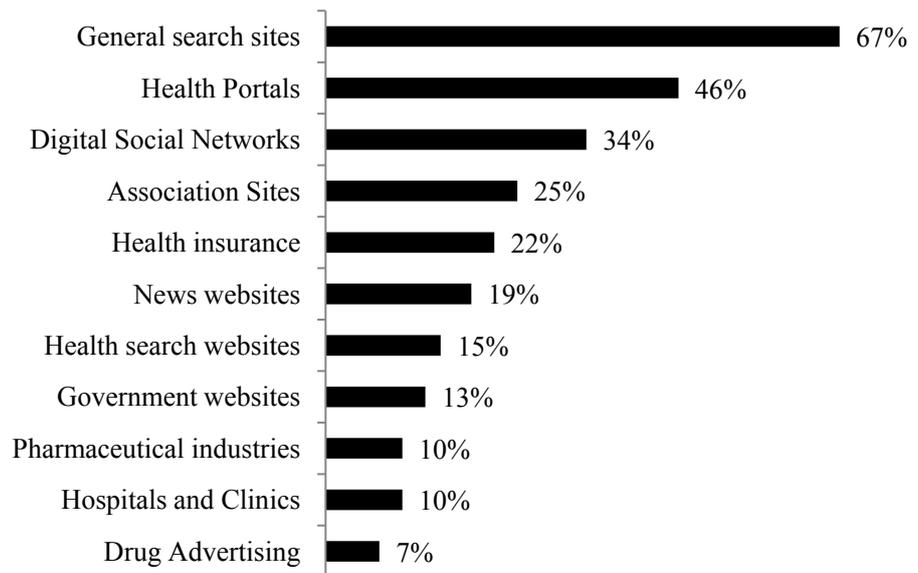

Figure 3. Virtual tools used in the search for health information.
https://docshare.tips/how-america-searches-health-and-wellness-icrossing_58b14619b6d87f
54748b61b2.html. Source: Accessed on 05/22/2019.

There are also several associations that maintain areas restricted to health professionals and also to the lay public, such as the Brazilian Society of Diabetes (http://www.diabetes.orb.br), The National Institute of Cancer

(https://www.gov.br/inca/pt-br) that provide information on diseases, their respective causes and preventive measures, among other information.

There is an unsettling question to be answered and it concerns the reason why people turn to digital social networks in the health area. Table 3 presents some of these reasons in order of importance.

2.3. The Danger of Self-Medication

There is a principle in medication administration that all nurses know, and which is much emphasized during the training of these professionals, called the principle of the five rights, that is: that the right medication is given to the right patient, in the right dose, in the right way and at the right time [13]. In another hand the correct dosage[2] differentiates the poison from the medicine" [14].

Referring to the Conference of Experts on the Rational Use of Drugs in Nairobi, capital of Kenya, where the existence of rational self-medication was recognized, and that according to the proposed definition, the adequate use of drugs occurs when the individual obtains them according to their clinical needs, in correct doses, for an appropriate period of time and at a low cost. These conditions, however, depend especially on the user, who must respect doses, schedules, and recommended restrictions [15]. In practice, self-medication happens in an uncontrolled way and most of it occurs without medical guidance or monitoring of a health professional, and often the user does not have enough knowledge to follow the principles of safe self-medication.

Table 3. Reasons for using social health networks.

To see what other patients say about the drug or treatment	36%
To research the knowledge and experience of other patients	31%
To learn skills or get training that helps me deal with my illness condition	27%
To get emotional support	17%
To build awareness around the disease or its cause	15%
To share my knowledge and experience about the remedy or treatment of my illness	14%
To share my knowledge and experience on a health issue	14%
To find patient recommendations and opinions about hospitals and other treatment options	13%
To find patient recommendations and opinions about hospitals and other treatment centers	13%
Para encontrar recomendaçoes de pacientes e opiniões sobre médicos	10%
To feel like I belong to a group or community	8%
None above	22%

Reasons given by users for connecting with others. Source: The Sociology of Caregiving 2014, p. 202.

[2]Way of using the medication, that is, the number of times and the amount of medication to be used each day, which varies depending on the patient, the disease being treated and the type of medication used. The dosage is related to the time of action and the therapeutic dose of the drug.

Some studies "show that 30% to 50% of patients do not use the medication as prescribed, due to the lack of adequate information" [16].

On the other hand, it is estimated that self-medication is the cause of death of approximately twenty thousand people a year in the country. Some studies indicate that 10% to 20% of the total cases of hospital admissions in the United States have the adverse effects of drugs as a causal agent [17].

Still within this same theme, 2016 records indicate that 18.58% of the total deaths from intoxication that occurred in the country were caused by drugs. According to these data, medicines represent the second toxic agent that kills most people in Brazil, behind only pesticides for agricultural use, responsible for 39.38% of deaths from intoxication [18].

3. Methodology

The design of this study has a descriptive and analytical character. To achieve the investigative purpose, the content analysis methodology was used. The research was developed with the corpus of publications on the Centrum Brazil fan page on Facebook, the leading brand of the multivitamins therapeutic class, according to Close Up International[3], on Facebook in the first three months of 2019.

According to the analysis organization script the different phases of Content Analysis involve three chronological poles: pre-analysis, material exploration and treatment of results/inference/interpretation.

In the first pole, the "floating reading" is carried out so that a more intimate contact with the text is established, allowing "[...] to be invaded by impressions and orientations".[4]

In the second pole, the categories are codified, which are then studied individually. In the third and last one, the treatment of the results obtained is carried out in order to have a more palpable idea of what would be behind each sentence, thus enabling an interpretation [1].

Based on the script of organization of analysis proposed this study followed, clippings and categorization of these contents were performed [1].

Fragments can be significant words, expressions, or phrases [19]. As "cutting criterion" or saturation we used what to takes into account the researcher's assessment where "the data obtained start to present some redundancy or repetition, not being considered relevant to persist in data collection" [20].

4. Results

Assumptions regarding the Content Analysis script, being in the first chronological pole, namely the pre-analysis, the "floating reading" favors a more intimate contact with the text [1], in this study it was considered the Centrum brand Fan page on Facebook.

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[3]Pioneer company in the development and application of analysis and research techniques, providing audits and reports for the Pharmaceutical Industry.
[4]"[...] invadir por impressões e orientações" (BARDINI, 1977, P. 96).

This first step pointed out that there is the Centrum Brazil fan page on this social network, launched in 1991 with currently 776,000 followers, which is the official channel of the brand. In it there are posts, invitations to lives with nutritionists and announcements of other presentations of the Centrum line such as Centrum Select, Man, etc. commercial.

The cover of the fan page (Image 1) displays images of the packages in two different sizes of Centrum "Vitagomas", highlighting the word "new", indicating that this is the launch of this new presentation for sale in the Brazilian market. In the background as a Watermark, there are healthy, middle-aged men and women with the logo superimposed and the phrase in the highlight: "it's more flavor and nutrition, it's Centrum", secondarily in smaller font, the phrase: "micronutrients into delicious chewable gummies, try it!"

In the other channels of this fan page (Image 2), such as photos on the timeline, there are posts with purchase reminders of the complete line of the "family" of Centrum products, photos on beaches and parks with mature and elderly people with messages such as: "enjoying life is a possible dream for those who plan to make it happen" or even, wishes for a good day for grandparents by Centrum Select 50+, or even a "did you know?" quiz, that your body does not produce vitamins, suggesting Centrum in "your daily routine".

In the campaigns channel of this fan page, in turn, there is one among several, entitled "Centrum takes care of you" with videos showing people in everyday work, study or challenging situations, where the Centrum brand suggests a boost to achieve these goals.

In the second chronological pole of Content Analysis [1] the categories of which are studied individually are codified. In this study, some parts of the analysis grid will be adopted, namely [1]:

● Physiological Values: health;
● Ego-related values: self-love;
● Values of play and joy: beauty;
● Diverse values: happiness.

Finally, according to the same author, in the third chronological pole, the treatment of the results is carried out so that there is a greater understanding of the subjective aspects, thus enabling a better interpretation.

It is not the purpose of this study to go into the conceptual merit of each of the areas of the analysis grid proposed by [1].

Analyzing the cover of the Centrum Brazil fan page, there is a subliminal correlation between the new "Vitagomas" presentation, represented by the packaging, people of both sexes, middle-aged, healthy in an urban and symbolic landscape, due to buildings, sidewalk and daily life of active individuals, without any correspondence to illness, disability or limitation of movement, doctors' offices or hospitals. The signature of the "Vitagomas" Centrum brand, "it's more flavor and nutrition, it's Centrum" leads us to infer that this medication guarantees well-being in routine situations without any relation to illness or indisposition.

There is still a certain personification, considering that Centrum "Vitagomas" can be seen as a friend or companion who accompanies the user described above, noting that there is no message or reference, however small, about side effects, possible complications due to self-medication, or the need for a medical prescription.

Analyzing the "campaigns" channel of the Centrum Brazil fan page, there are several of them with short videos, such as "Centrum takes care of you", whose videos communicate with the same target audience and aspects of daily life described above, on topics such as : start the day with Centrum; in another video of this same campaign we have: my plan for today: keeping my balance and a second video: going after my goals; there is another one with the hashtag #segueoplano with motivating messages like: don't give up, run after, follow the plan, count on us, etc.

The videos on this channel reinforce the personification of a companion and friend of the Centrum brand at all times, positioning itself as a booster that helps in the achievement of daily goals, whether professional or personal. There are no digital influencers or celebrities in any of the videos that reinforce or sign the campaigns. On the other hand, the brand does not communicate or highlight functional benefits, pharmacological properties of the drug or specific indications, there is a direct line of communication that places it as versatile, thus ensuring well-being and support in the pursuit of day-to-day goals.

Finally, analyzing the "photo channel" of the Centrum Brazil fan page, this is a combination of a "bulletin board" (there is a post-it photo pasted on the fridge door with the reminder: buy Centrum), there is also an invitation to a live with a nutritionist about Carnival, and photos with messages like did you know? That your body does not produce vitamins!

The communication line follows the same strategy described in the previously analyzed channels, and it is clear that the Centrum multivitamin is not placed as a product to solve body problems (mechanistic view of the body) or correct harmful practices caused by the inappropriate lifestyle that consumers adopt for themselves.

It is possible to understand after evaluating the Centrum Brazil fan page, from the perspective of the four categories of the analysis grid [1], and objects of analysis of this work, namely: self-love that transforms because when we learn to love ourselves, we stop fighting ourselves and looking at what is most positive; the health that values what is inside, the inner light; beauty for being unique and so important for being who you are not comparing yourself to others; and finally, the happiness that gives us the certainty that our lives are not passing in vain.

5. Considerations

This article proposes to study the Content Analysis of the Multivitamin Centrum—Over the Counter—OTC Medicine, whose corpus was the digital social network Facebook, following the assumptions regarding the script of Content

Analysis the first chronological pole, considered a pre-analysis or "floating reading", in a next step the categories to be studied individually were codified, and finally in the third chronological pole [1], the treatment of the results is carried out so that there is a greater understanding of the subjective aspects enabling a better interpretation.

It was possible to understand after analysis that the Centrum brand from the Centrum Brazil fan page seems to personify a friend or companion, placing itself as a booster or supporter, who supports the achievement of daily goals, whether professional or personal. On the other hand, the brand does not present itself as a product to solve health problems or correct harmful practices caused by consumers' inappropriate lifestyle.

Even though there are terms, conditions, and notes on the channels of this fan page, the brand does not resemble and does not position itself as a medicine that cures a disease, which has side effects, does not make any reservations about self-medication, in addition to not clearly mention that a doctor should be sought after. The communication strategy seems to be based on reaching the consumer or "prospect" encouraging him to consume.

Finally, according to quantitative information brought by this author throughout this study, it was possible to qualify the power of digital social networks and the internet as demand drivers in the health area, which suggests an in-depth study that considers regulatory aspects of this therapeutics class of products.

It was possible to shed light on a relevant, complex, contemporary theme, which does not offer answers to numerous questions, and its results are not, therefore, subject to generalization.

The author's wish is that the discussions presented here serve as a stimulus for larger and more in-depth studies.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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Annex 1

Image 1. Centrum Brazil Fan page Cover. Available in
https://www.facebook.com/CentrumBrasil/?__tn__=%2Cd%2CPR&eid=ARDz5bCNHRc3vfYhJSn7_wQR7CnKM28QBD88cXIV
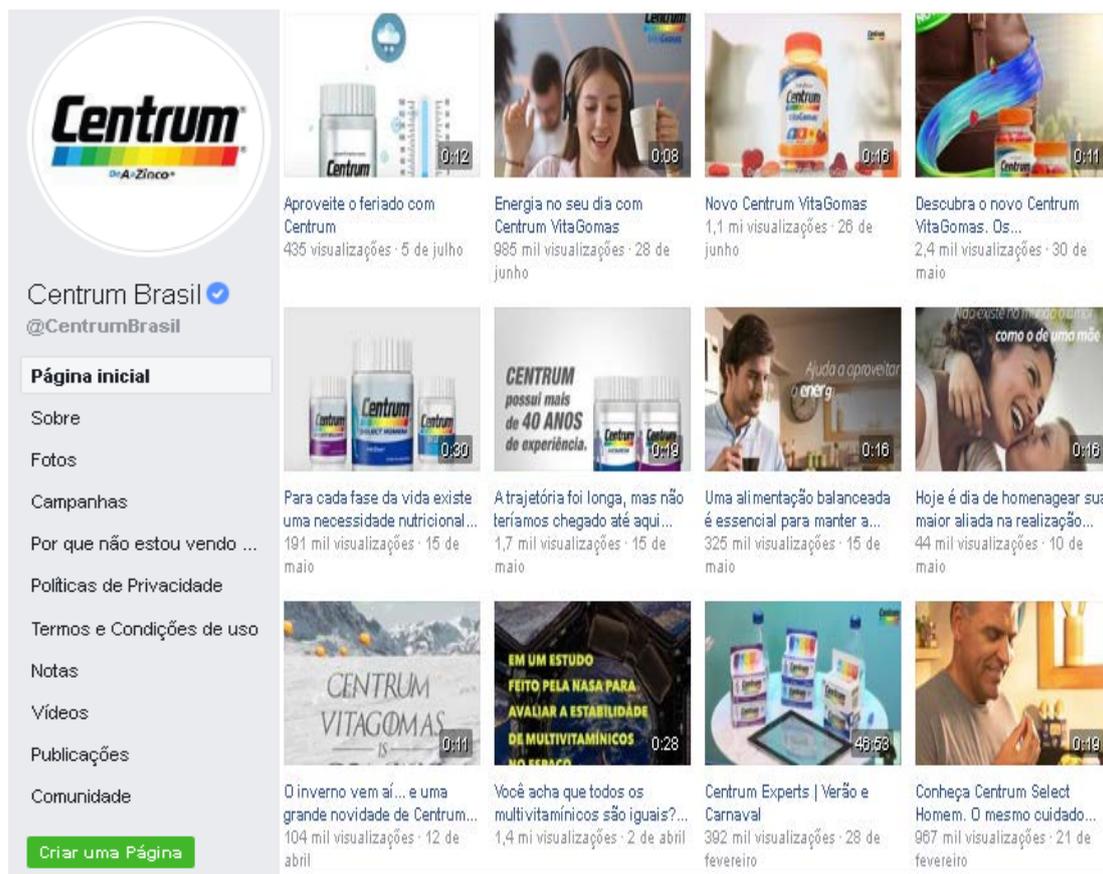KX0YVgoYZh8UtK9vv9WMqa6oTV9QcjklktOmWd. Accessed on 06/07/2019.

Image 2. Channels and photos-Fanpage Centrum Brazil. Available in
https://www.facebook.com/CentrumBrasil/?__tn__=%2Cd%2CPR&eid=ARDz5bCNHRc3vfYhJSn7_wQR7CnKM28QBD88cXIV
KX0YVgoYZh8UtK9vv9WMqa6oTV9QcjklktOmWd. Accessed on 06/07/2019.