

**Framing and Communicating Expertise on Social Media**  
**A Qualitative Case Study on Health Influencers on YouTube**

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## **Abstract**

Online communication channels provide people with a vast amount of information from different sources. Health influencers on social media are one of the sources that people use to gain health information and support regarding health-related issues; they are people with different backgrounds and expertise that social media users follow and perceive to be experts in that field.

This qualitative case study employs content analysis to analyze videos of three health influencers and explore the kind of expertise that each case communicates to their followers. Videos are analyzed based on an analytical framework that looks into Syntactic, thematic and rhetorical structures to explore how they frame their messages in order to be perceived as experts. The study detected three different kinds of expertise who have different styles in communicating their expertise and in framing their messages: the informative awareness expert, the self-referential expert and the practitioner expert. Further details on the different and common framing styles each expert used is discussed in this thesis. Analyzing expertise online provided an insight on health influencers characteristics and their strategies to perform their expertise. It also suggests the kind of health information seekers who could be interested in this kind of expertise. The research results provide insights on regulating the potential effects of health influencers online.

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## **Chapter 1: Introduction**

Internet and social media websites have provided a massive amount of information in many fields. Although social media websites' primary purpose is to support social interactions, many users use it as a source of information (Brenner, 2012; Lenhart et al., 2007; Pew, 2012).

As these websites are becoming increasingly popular among information seekers, concerns about user perception of expertise and credibility of information are arising. The online nature of the communication process altered traditional notions of trust and credibility and allowed the emergence of many kinds of expertise on its platforms. This process encourages research that explores the credibility of information published and the kind of experts found on these platforms.

Studies have shown that the source and content of information affect users' assessment of credibility (Flanagin and Metzger, 2011) while other studies suggest that online information seekers assess credibility based on visual design elements rather than content or source information (Fogg et al., 2003).

In the field of health communication, the number of people seeking health information online is growing rapidly. According to the most recent Pew Internet and American Life Project national survey (2013), 80% of patients go online for health information. The evolution of social media websites has changed the way individuals interact with health information. Individuals are no longer passive receivers; they now seek, collaborate, and evaluate health information online (Macario et al., 2011). Social media platforms have given a free, open medium for everyone to engage and interact with different health topics online; users can provide answers and advice to other users'

health-related concerns. Anyone can start a blog, Facebook page, or a YouTube channel about any health topic and send health information to these platforms' users.

Shannon and Weaver's 1964 linear model of communication consists of four basic elements which are the sender, the receiver, the channel and the message. The current health communication process on social media is challenging since the line defining these the role of these elements in the communication process is becoming blurry. The openness and expanded outreach of social media websites (the channel), caused an overlapping of the roles of the sender and the receiver of the message in the communication process. This overlapping of roles emphasizes the importance of defining who the communicators of health information on social media platforms are and what kind of expertise they offer. Communicators of health information could be professionals, experts, amateurs, institutions, or anybody who posts information. They could also be the information seekers themselves.

Back in time, the term "opinion leaders" was used to describe "individuals who exert an unequal amount of influence on the decisions of others... those individuals from whom others seek advice and information" (Rogers & Cartano, 1962, p. 435). Audiences considered the information provided by opinion leaders trustworthy and valuable when making decisions (Stern & Gould, 1988). The evolution of social media allowed this phenomenon to evolve into a new shape on the internet and social media. The concept of opinion leader has developed into the so called Social Media Influencer (SMI) in today's social media. SMI's are online opinion leaders who use existing social media platforms to share posts with their followers about their personal information, products, and services that they have used or tried (Freberg, Graham, McGaughey, & Freber, 2011). On social media, the traditional notion of an opinion leader is developed into the new notion of SMI's. Their opinions are perceived credible and trustworthy as they influence

their followers (Gashi, L. 2017). Their characteristics include credibility, high activity, distinct brands, large followings, and high exposure (Ioanid, Militaru, & Mihai, 2015). SMIs have their own identity online, that a lot of people follow and support. They possess high activity on these social media sites as they create content and interact with their followers via comments and replies. Credibility is related to the fact that people trust opinion leaders and believe them. SMIs keep some of the main characteristics of opinion leaders like credibility and large followings to help them convey their messages as they perform their expertise.

Nowadays, there is a noticeable presence of individuals on social media who are considered influencers as they can reach out to users and influence their decisions and behaviors. Social media provides a platform for health advocates and individuals interested in health-related topics to communicate their own health concerns and messages to a broad base of audience. They can drive change and persuade others when it comes to health and well-being (Schönfeldt & Hall, 2012). Health influencers have the ability to drive a conversation on a particular topic and engage with people (Jones, 2012).

Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (Ratzan et al., 2000). The current health communication process on social media is becoming challenging for both the health information seekers and whoever is communicating health information. In order to meet these challenges, health literacy is highlighted to enable communicators as well as health information seekers to assess the quality of the information and present it.

This research develops an understanding of the kind of expertise that is framed and communicated by so-called “health influencers” as a source of health information online and viewers on YouTube. Goffman (1974) suggested that frames are means of

creating or motivating a certain interpretation. According to Lecheler and De Vreese (2012), “a frame can affect an individual by stressing certain aspects of reality and pushing others into the background—it has a selective function” (p.186). Frames in communication could be observed in the words, images, phrases and presentation styles a speaker uses to relay information (Klar et al. 2013).

In this particular study, the relevant visual and discourse elements of framing are highlighted to recognize the different frames used by health influencers to convey their messages. Pan et al.(1993) frames include four main categories of structures: Syntactic structures that refer to the patterns of the arrangement of words or phrases, Script structures are closely related to syntactic structures and they refer to a sequence of activities or events narrated in the discourse, Thematic structures that reflect the themes and the central core ideas presented in the discourse, and Rhetorical structures that are associated with persuasion and conveying an intended meaning. Each of these categories has a set of intricate framing devices. Frames can explain the way health influencers shape their messages to meet their audience's expectations; it could be a critical motive that makes an audience perceive health influencers as a credible source of information and as experts in their field.

This study is a qualitative case study analyzing a total of nine videos posted on the YouTube channels of three active Vloggers (video bloggers) at the time of conducting this research. These Vloggers are considered health influencers on social media. A large audience follows those three cases and their videos have a relatively considerable number of views and interactions, more than 1000 views, likes or shares. The research developed an analytical framework based on the Framing Theory proposed by Goffman (1974) and many other indicators of expertise based on the literature review that will be discussed later in this research. The study analyzed the different elements of

framing and communicating expertise that existed in the discourse and the visuals of the selected videos.

## **Chapter 2: Literature Review and Conceptual Framework**

Health communication has been defined as "The study and use of communication strategies to inform and influence individuals and community decisions that enhance health" (Freimuth et al., 2011, p. 77). Ratzan (1994) views it as the art of informing, influencing, and motivating individual, institutional, and public audiences about important health issues.

The scope of health communication deals with the enhancement of individuals' health status and life quality. Studying health communication is important for developing effective patterns that can raise awareness of health risks and propose health solutions. Moreover, health communication affects people's health attitudes and helps individuals find support from other people in similar health-related situations (Healthy people, 2010).

The field of health communication has witnessed significant changes due to continuous advancements in technology and specifically the internet. These changes include an increasing number of communication channels, health issues competing for public attention, and increased demand from the people for better quality health information (Menefee, 2016). Internet collapsed the communication between people and experts by providing shortcuts to information, which made people believe that they gained enough information to make important decisions concerning their health and wellbeing on their own (Nichols, 2017). New communication channels gave people the opportunity to select health information based on their personal interests and inclinations (Menefee, 2016). As a result, social media has now blurred the line between expert and peer to peer health information (Menefee, 2016).

## **Seeking Health information online**

In today's digital world, the behavior of seeking health information online is spreading among many internet users. Parents look for information about their children's health, and young adults would consult a search engine on their cases before scheduling an appointment with their doctor. As a result, exploring in literature the benefits and the drawbacks of querying health information online, that are relevant to this thesis topic, is a good starting point to understand more about Health influencers on social media.

Several studies have addressed the benefits and drawbacks of seeking health information online as opposed to acquiring health information from traditional sources (Cline & Haynes, 2001; Gray et al. 2005; Eastin, 2001; Cotton & Gupta, 2004; Powell et al., 2011). Online sources offer one significant benefit for Health Information Seekers (HIS); Interactivity (Cline & Haynes, 2001). HIS can choose health messages based on their own needs, language levels, and knowledge level as the same information can be offered in several ways depending on the target audience of the publisher. As a result, social media platforms have empowered health information seekers (HIS) to interact interpersonally with health professionals and with each other. Another added advantage is that some of these social networking services offer total anonymity which allows the search for sensitive health topics and interaction without the disconfirmation of face-to-face interaction (Cline & Haynes, 2001).

On the other hand, there are several potential drawbacks of seeking health information online (Cline & Haynes, 2001; Gray et al. 2005; Eastin, 2001; Cotton & Gupta, 2004; Powell et al., 2011). The most critical disadvantages and the most relevant to the objective of this paper is the credibility of sources and the quality of information. Web 2.0 enabled the publishing of uncontrolled and unmonitored health information to

spread widely (Cline & Haynes, 2001). The ability to both access and edit this information allowed anyone to claim medical expertise (Pereira & Bruera, 1998). While many online sources offer high-quality health information provided by health professionals, medical institutions, and medical research centers, many individuals provide health information online (Eysenbach & Jadad, 2001). Some of those individuals falsely claim to have specialized knowledge or skill while others promote unproven remedies that give false hope and inaccurate information about their outcomes (Cline & Haynes, 2001). Finally, even well-intentioned individuals who provide information based on personal experience can be ignorant to other aspects affecting the diseases they suffered from and the treatments they tried and so the information they provide may not be accurate or applicable to everyone that chooses to follow their advice (Ridley, 2005).

In addition, knowing who online health seekers are and what they look for are two essential questions that are addressed in literature and can provide a further understanding on how health influencers on social media frame their messages to different health seekers online.

The majority of online health information seekers tend to be well-educated and literate (Health online, 2013). Women, as well as young consumers, are more likely to seek health information online than men or senior users. Also, people who rely on online sources for health information more than traditional sources lead healthier lifestyles, and are more health information oriented (Nădășan, 2016).

Research suggests that users access health-related information online for three primary purposes; looking for information regarding various health issues, participating in forum discussions, and seeking medical advice from health professionals (Nădășan, 2016). To elaborate, they use resources like search engines, online encyclopedias and

popular websites like WebMD or websites that have information relevant to their cases. It is found that search engines usually display either popular or paid sources as top results and HIS usually don't explore further results (Jerath, Ma & Park, 2014). In fact, according to a report on the value of positioning search results on Google, less than 10% of users clicked on results in the second page, whereas the other 90% clicked on first pages' organic (unpaid) results<sup>1</sup> (Chitika, 2010). HIS find online support groups convenient to obtain immediate health information for free and on an anonymous basis (Grandinetti, 2000). Support groups also provide HIS with emotional support as they relate to other users who share the same experiences or offer them diverse opinions and expertise on their cases (Cline & Haynes, 2001). Many HIS choose online communication methods to contact their physicians or health care professionals (Ueckert et al., 2003). For example, many health professionals offer consultations online via emails, video conferences, or virtual doctor applications (Cline & Haynes, 2001).

Regarding the kind of information that users seek, Pew Research conducted a telephone survey of over 3,000 adults living in the US looking into the kind of health information that users search online. The survey showed that 63% of online users looked up health information related to a specific disease. Another 44% of health seekers searched for information on diet, nutrition, and vitamins. An additional 36% were interested in exercise or fitness information online (Health online, 2013). 90% of health-information seekers look for information related to physical conditions (Pew Internet and American Life Project, 2000c). Topics related to children's health and leading causes of

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<sup>1</sup> According to Google Support, Organic results are “free, unpaid listings that appear as they are relevant to someone’s search terms”. They are different from non-organic results which are Paid advertisements that appear at the very top of the search results above the organic ones in an Ad box.

death like heart disease and cancer were commonly searched by HIS (Cyber Dialogue, 1998).

In turn, information found by HIS can change the medical decisions taken by them or by their health professionals and can help them manage their own health care (Pew Internet and American Life Project, 2000). It is reported that the online findings of these searches influenced the decisions of 47% of HIS who looked up information for themselves and 36% of those who looked up information on behalf of others (Pew Internet and American Life Project, 2000).

### **Social media as a source of health information**

The growth of social media shifted the process of seeking health information from just receiving information to interacting with it and with other people (Hoyt, 2015). According to a 2016 Pew Research study, 80% of users aged 18-24 are willing to use social media sites as channels for sharing health information, while 90% would trust health information on social media sites (Greenwood et al., 2016). Almost one-fifth of social media users have gone on social media to look for people who might share the same health concerns (Hoyt, 2015). Half of the Internet users who looked for health information online were found to be engaging in one or more health-oriented activities on a social media website, which can include watching a video about health, reading a post about a particular health topic, or commenting on a piece of health information (Hoyt, 2015).

### **Video content**

It is important to highlight in literature the role of video-based content in health communication online. Studies show that video content is the most engaging content on

the internet and that information retention rates scale higher for it; audience memorizes the information and relates more to it (Morgan et al., 2010; Elder, 2017, Scott, 2015; Stelzner, 2014;). Also, Video content allows non-verbal communication which boosts interactivity and interpersonal communication (Scott, 2015). People nowadays prefer watching a video that presents an idea or offers a product than reading a long article about it. Moreover, lately, text-based social media websites like Twitter allowed for more images, GIFs, and video content to acquire more users (Elder, 2017). A survey conducted in the US for over 3000 adults, suggests that 25% of Internet users have watched a video online about health or a medical condition (Nădășan,2016). So, video content provides visuals, graphics, audio and text which could be more engaging to the audience and would motivate them interact with the information.

In addition, Facebook and YouTube were considered the most used social media sites to view health information (Hoyt, 2015). A recent survey reported that 61% of enterprises consider YouTube one the most popular social media channels (Top Social Media Management Software, 2016). In fact, video content was found to outperform images and articles on social media (Top Social Media Management Software, 2016). This study uses YouTube videos as an example to understand the phenomenon of health influencers in today's social media.

YouTube is a free for all medium, so anyone can access the content published on it. However, like most social media websites there are algorithms associated to YouTube and the way the information is accessed on it. According to Hootsuite blog, YouTube algorithms is a search and discovery system that determines what viewers see by making some videos more accessible or visible than others. These algorithms are connected to

search engines optimizations (SEO)<sup>2</sup> and could also be connected to paid advertisements that push content on search results or make some information more accessible than others.

### **Social media influencers and health influencers**

By reviewing the literature, the term social media influencers (SMIs) was mentioned many times in different studies, whereas, the term health influencers was not explicitly used to describe the social media influencers in the context of health communication research. This study proposes the term Health Influencers to analyze different cases of Social Media Influencers in the context of online health communication.

SMIs are described as “a new type of independent third-party endorser who shapes audience attitudes through blogs, tweets, and the use of other social media” (Freberg et al., 2014, p.1). Gillin (2007, p.27) describes the new influencers as experts in some field who could be researchers, practitioners, or people with lived experiences, and who are best positioned to describe that field, “They exert influence by aggregating the thoughts and opinions of others whom they trust.” Online communities follow their conversation and recognize them as valuable opinion leaders (Gillin, 2007).

Many attempts in literature developed several views for SMI; micro-celebrities, digital opinion leaders, and social leaders (Khamis, Ang & Welling, 2017; Merwe & Heerden, 2009; Pedroni, 2016). Firstly, Katz and Lazarsfeld (1955) coined the term Opinion Leader, defining it as influential individuals who have a significant effect on people

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<sup>2</sup> According to Google support, SEO is increasing the number of visitors to a particular website or content by placing it in higher ranks in search results.  
(<https://support.google.com/webmasters/answer/7451184?hl=en>)

around them. Opinion leaders are also defined as ordinary individuals who can influence consumers, followers or opinion seekers by their opinion and advice (Flynn et al. 1994). SMIs are viewed as digital opinion leaders who are perceived as experts in a specific field and so they can significantly influence other members of the online community (Freberg et al., 2011). Opinion leaders transmit authoritative opinions through word-of-mouth, or in this case electronic word-of-mouth (Miao, Meng & Sun, 2016). They acquire this authoritative label from their knowledge and expertise that makes them highly involved in a specific topic (Feick & Price, 1987). It is argued that SMIs are a new approach of online performance; they use technologies like social platforms, blogs, and videos to expand their audience and recognition among members of online communities (Freberg et al., 2011). They are sometimes described as autonomous outsider endorsers that use social media to influence users' attitudes (Freberg et al., 2011). SMIs have a lot of direct friends and followers on social media websites, but their real significance lies in their extended reach to indirect followers (Dahlén et al., 2010). However, it is important to mention that influencers put much effort on maintaining their followers and impression of affection as they usually have hidden business interests like promoting particular products or influencing specific purchase decisions (Abidin & Thompson, 2012). Impression of affection refers to a given impression of likeness and attraction between the health influencers and their followers.

Secondly, the view of SMI as social leaders describes them as individuals who are perceived to have qualifications that satisfy the interpersonal and social needs of their group. Thus, they can significantly affect their group behaviors, thoughts, and feelings (Forsyth, 2015).

Finally, the term micro-celebrity was introduced in 2001 by Theresa M Senft, defining them as individuals who gain popularity on the internet through blogs, vlogs,

and other social networking sites (Khamis, Ang & Welling, 2017). SMI can function as a micro-celebrity that desires visibility and attention (Pedroni, 2016). Djafarova (2018) suggest that micro-celebrities are met with great admiration, association, aspiration, and recognition from their audience.

Freberg et al. (2014) used methods that relied on factors like the number of daily hits on a blog, the number of times a post is shared, or the number of followers, as a starting point to identify SMIs. The research suggests that organizations and brands can use the persuasive power of SMIs who are positively perceived credible to increase their audience reach and promote their brands.

Gillin (2008) suggested three criteria to assess the personal influence of SMIs. The first criterion is participation level (defining the level of engagement and participation of their audience with the content they post). The second criterion is the frequency of activity (to define how often they post content and how often audience engages with it), and the third is the prominence in the market or community (their visibility among other influencers or other online sources in general). Social media influencers tend to assess their own activity on social media websites in order to maintain the relationship they have with their audience; they aim to promote their online activities and obtain audience comments and feedback (Gillin, 2008).

According to Heldman et al. (2013), health influencers are described as individuals or organizations that achieve a status because they are perceived as independent and trustworthy. They are credible and persistent in convincing others, and their conversations motivate people to notice a topic or idea and show support (Heldman et al. 2013). In that sense, the research applies these concepts to the proposed term health influencers on social media in the context of health communication to explore how they frame their messages and how they exhibit the notion of expertise to their audience.

## **Health literacy and e-literacy**

Health literacy and e-literacy is another concept to be reviewed in this literature as it closely touches on the topic of this study. Health literacy is defined as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.” (Kindig et al., 2004, p. 32). Many people today are active consumers who make key decisions related to their health rather than passive recipients of health information (Nielsen-Bohlman, 2004). Some people use online health tools and resources to take care of themselves and their families as a way to reduce their health care cost (Osborne, 2005). E-literacy is the set of skills that help people make efficient use of the materials, tools, and resources that are available online (Halvorsen, 2009). In this digital environment, the need for health literacy and e-literacy skills is growing to meet users’ increasing use of health information online.

Health literacy affects the online health information seeking behaviour of individuals. Gaglio et al. (2012), suggest that individuals with inadequate health literacy depend on their physicians as a source for obtaining health information while individuals with sufficient health literacy, on the other hand, rely on both their physicians and the Internet in seeking health information.

Health literacy includes a diverse, complex array of skills that the receiver, as well as health communicators, need to be able to function in a health-related activity. These skills are believed to facilitate dialogue and discussion when engaging in a health-related activity (Nielsen-Bohlman, 2004). Those who search for health information should know how and where to look for the information and how comprehend it. They should also be able to evaluate the credibility and the trustworthiness of the source (Gaglio et al, 2012).

In the light of this study, health literacy skills could be essential for both health influencers and social media users. Osborne (2005) views health literacy as a shared responsibility between the provider (whoever provides health information) and the receiver (whoever receives health information). Health influencers need to have health literacy skills to design and convey understandable health-related messages through their media channels. Understanding health information accurately affects the interaction of the individuals with the source of health information (Nielsen-Bohlman, 2004). Furthermore, this interaction could affect the individual's health status and outcomes (Nielsen-Bohlman, 2004).

Ye (2010) argues that the Internet is considered by users to be the third most trusted source of health information after doctors and government health institutions, however, the quality of health information could be poor. Evaluating online health information and assessing source credibility is challenging but users could assess how credible the source is based on the nature and the characteristics of the message they receive (Wang & Strong, 1996). Source credibility criteria such as perceived source experience, transparency, perceived knowledge, and reputation of the source were used by users respectively to evaluate health information (Avery, 2009).

### **Experts and non-experts in communication**

Defining experts in today's social media is becoming challenging as hundreds of thousands of pieces of user-generated content are being published every day on websites (Newman, 2014). Newman (2014) raises the question of how the average reader determines who is an expert versus who is just an online user creating content? This question gets problematic as expertise is far too subjective in his opinion. Nichols (2017) suggests that the "idea that 'everyone can be an expert' is so dangerous. It is true in a relative sense that almost anyone with particular skills can develop specialized

knowledge to which others, in most circumstances, must defer. Trouble, however, rears its head when people start to believe that knowing a little bit about something means expertise” (p. 37). For example, people sometimes view individuals who have relevant experience in something or who have done something for a long time as experts even if they did not study that field formally (Newman, 2014). However, Nichols (2017) argues that “doing something well is not the same thing as becoming a trusted source of advice or learning about a subject” (p. 37). In other words, defining expertise is problematic and subjective as expertise is no longer restricted to those who have credentials, professional experience or intensive knowledge. Individuals can claim being experts based on some acquired skills or knowledge or even based on their lived experience.

Hoffman (1998) described a scale of proficiency starting with a novice which is defined as a new member in a certain network or domain with minimal exposure to that domain<sup>3</sup>, and ending with expert which is defined as “The distinguished or brilliant journeyman, highly regarded by peers, whose judgments are uncommonly accurate and reliable, whose performance shows consummate skill and economy of effort, and who can deal effectively with certain types of rare or “tough” cases. Also, an expert is one who has special skills or knowledge derived from extensive experience with subdomains” (Chi, 2006. p. 22). “Experts stay engaged in their field, continually improve their skills, learn from their mistakes, and have visible track records. Over the span of their career, they get better, or at least maintain their high level of competence, and couple it to the wisdom that comes from time” (Nichols, 2012, p. 33).

Chi (2006) defines experts as those who have more knowledge and non-experts as those who have less knowledge; this definition builds three theoretical assumptions:

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<sup>3</sup> By domain, Chi (2006) refers to “both informal domains, such as sewing and cooking, and formal domains such as biology and chess” ( p.21).

“First, it assumes that experts are people who have acquired more knowledge in a domain (Ericsson & Smith, 1991, Table 2.1) and that this knowledge is organized or structured (Bedard & Chi, 1992). Second, it assumes that the fundamental capacities and domain-general reasoning abilities of experts and non-experts are more or less identical. Third, this framework assumes that differences in the performance of experts and non-experts are determined by the differences in the way their knowledge is represented” (p. 36). These assumptions highlight the difference between experts and non-experts in terms of reasoning, abilities, knowledge and performing their expertise. Expertise is more related to the way these individuals perform their expertise on digital communication platforms.

Treem (2012) views expertise in a communicative manner that treats it not as something that individuals have but as “an attribution that emerges through social interaction and is communicated to others through the process of organizing” (p. 25). Treem suggests that expertise in that sense could be a social construct that is developed through communication process and that it is something that individuals acquire through interacting with other people. For example, in Treem’s study, physicians emphasized the importance of communicating properly and openly with their patients and doing that helped them acquire more experience and knowledge with these cases and similar ones. As a result, the element of communication is crucial when addressing the topic of expertise and how it is created.

Scholars have viewed expertise from a traditional one-dimensional view that suggests that expertise is something that individuals own or accomplish, thus limiting the term expert to rare high-level specialists. The first dimension refers to credentials, which is viewed by Nichols as a signal to others that people with credentials are competent and their skills are confirmed by their peers in the same field (2017). Nichols (2017) suggests

that credentials could be a start to evaluate someone's expertise. However, he states that "Some of these credentials are new inventions and some might not matter very much. In some cases, credentials are made up by states and localities as revenue gimmicks, while others affirm no skill other than passing a test once and then never again" (p. 31). He adds that talent is the essence of expertise; "Talent separates those who have gained a credential from people who have a deeper understanding of their area of expertise" (Nichols, 2017. p. 32).

Collins (2016), on the other hand, adds another two dimensions: esotericism of expertise and the degree of exposure to ubiquitous tacit knowledge<sup>4</sup>, that help recognize "ubiquitous expertise" that everyone has. The first added dimension suggested by Collins (2016) is a set of expertise that is developed as a result of socialization or interaction with individuals of relatively higher knowledge; the more an individual gets immersed in a knowledgeable society of experts, the more that individual will acquire expertise. Secondly, the esotericism of expertise dimension views common tacit knowledge, which everyone possesses implicitly like language-speaking or literacy, as a kind of expertise as well. For example, in the context of these two dimensions, language and discourse could be viewed as a way of acquiring expertise as well as a way to present it to others (Collins, 2016).

Liao, MacDonald, and Yuan (2016) propose that "the utilization of communication technologies may potentially facilitate expertise recognition by reducing differences in communication opportunities, styles, and accommodation among people from different cultures" (Yu Xu, 2017, p. E10). Thus, individuals who use communication technologies like social media and video tools are most likely to be

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<sup>4</sup> According to Collins (2016), "Ubiquitous tacit knowledge" is all the things we come to learn as we become members of our native society (p.62).

recognized for their expertise as these means reduce the gaps of communication and give them the opportunity to communicate with a broad base audience. Merritt et al. (2016) review the evolution of systems that help find and locate individuals with expertise.

### **Credibility**

According to the Cambridge dictionary, credibility is the fact that someone can be believed or trusted. Fogg & Tseng (1999) defines source credibility as a perceived quality that is not inherent in an object or a person. Jung et al. (2018) suggest that attractiveness, expertise, and trustworthiness are the components of source credibility. Attractiveness refers to physical or visual attractiveness of the source or the content. Perceived expertise refers to the knowledge and the capabilities perceived by audience. Trustworthiness refers to the communicators' confidence in their assertions (Hovland, Janis, & Kelley, 1953).

Credibility is a hurdle facing health information seekers as they encounter massive flow of unregulated information online. Unlike new interactive media, assessing the credibility of information on traditional media was easier and dependent on medium reliability as a source (Flanaigan & Metzger, 2000). For example, television was found to be a more credible source of information than newspapers, whereas online information was found to be as credible as television, radio, and magazine (Flanaigan & Metzger, 2000).

Eastin (2001) suggests that source expertise and knowledge of content affect the perception of message credibility. Nielsen (2014) explains how people seek expert content when making purchase decisions; his study found that 85% of consumers regularly or occasionally seek out trusted expert content as credible third-party articles & reviews when considering a purchase. Thus, user-generated content and individuals who

are perceived as experts on social media can influence people's decisions. Also, the perception of credibility and expertise is closely interrelated.

Hovland and Weiss (1951) developed a source credibility theory that has been applied in many areas of research. The theory states that receivers are more likely to accept a message that is communicated through an individual who is perceived as credible. In their study, the same piece of information was presented by a credible and a non-credible source; more participants changed their opinions to match the credible communicator than the non-credible one. The study concludes that people's opinions can be changed when subjected to a counter opinion presented by a credible source.

Two models attempt to explain differences in communicator's persuasiveness in literature: source-credibility model (Hovland et al., 1953) and the source attractiveness model (McGuire, 1985). The source credibility model suggests that expertise and trustworthiness are two essential qualities for source credibility and perception of the message as valid (Hovland et al., 1953). In that model, expertise was defined as "the extent to which the communicator is perceived to be a source of valid assertions" and trustworthiness as "the degree of confidence in the communicator's intent to communicate the assertions he considers most valid" (Hovland et al., 1953, p. 21).

McGuire (1985) source-attractiveness model identifies several factors that help persuade receivers. These factors include physical attractiveness of the source, similarity of the source in relation to the receiver such as using similar language or having similar values, familiarity, and likability towards the message or its source by the receiver (McGuire, 1985). So, message sources could be perceived more credible and persuasive to the viewers if they develop a certain kind of likability, attraction or similarity with their viewers.

A systematic review on healthcare information found on YouTube argues that, although several reliable postings from government and professional organizations are available, there is much misleading information found on YouTube, and that health information seekers are highly exposed to this material (Madathil et al., 2015). Many of the videos created and uploaded by YouTube users to express their opinions on healthcare topics contain information that present public health interventions inaccurately (Madathil et al. 2015). Several studies found that videos with inaccurate or misleading information had a higher average number of likes than their accurate counterparts. In turn, the effectiveness of health campaigns can be significantly reduced as users perceive inaccurate videos to be credible (Ache and Wallace, 2008; Briones et al., 2012; Keelan et al., 2007).

In reference to the inaccuracy found in many of the health information videos, a study analyzing YouTube videos for acute myocardial infarction found that 58% of the videos were featuring personal experiences of the symptoms and signs of the disease, whereas 45% of the videos explained treatment and prevention methods (Pant et al., 2012). Another study examining rheumatoid arthritis video content on YouTube reported that nearly 30% of the videos were inaccurately promoting unscientific therapies, whereas only 54% (n=102) of the videos were useful (Singh et al., 2012). One-third of the videos included in this study were found to be posted by independent users, followed by videos posted by medical advertisements and for-profit organizations. In addition, there were no differences in the number of views between the useful and misleading videos (Singh et al., 2012). Which shows that misleading and useful YouTube Health related videos are equally accessible by health information seekers.

### **Theoretical framework**

Health information seekers on social media have different levels of health literacy that help them decide whether information sources are credible or not. These sources use

different frames to communicate information and express their expertise. Through the lens of Goffman's (1974) framing theory, the research explores different frames to understand how individuals on social media frame their messages in a way that makes them perceived as experts or reliable sources of health information and become so-called health influencers on social media.

### **Theoretical framework on Framing**

The notion of framing proposed by Goffman (1974) is a way to organize and make sense of our social experience. Goffman calls frames the “schemata of interpretation” and argues that they are mechanisms of meaning to organize and communicate an experience. Many studies developed an understanding of frames and their effects in different Media channels (Haley, 2010; Shih et al., 2008; Semetko & Valkenburg 2000). Scholars have been analyzing frames to explain links between media framing of public policies and people's perceptions towards these policies (Semetko & Valkenburg 2000), compare coverage across media outlets and (Haley, 2010) examines variations in messages through different media channels (Shih et al., 2008). In the news, for example, several frames were defined as “conceptual tools that media and individuals rely on to convey, interpret and evaluate information” ( Neuman et al., 1992, p. 60). In the health field, studies examined how frames were used in outbreaks and disease coverages across different media outlets (Duru, 2016; Shih et al., 2008).

Kahneman and Tversky (1984) argued that the same information can have different impacts on people's decisions if it is presented differently. For example, Werle et al. (2012) explored the effect using different arguments in framing health message to preventing obesity in adolescents. The study found that social arguments, encouraged healthier food choices than a health argument in the form of promotional health message;

health arguments were more effective when they showed the risks associated with a behaviour over the benefits of avoiding that behaviour.

Entman (1993) suggests that framing is selecting “some aspects of a perceived reality” to enhance their salience “in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation” (p. 53). Health influencers use different frames to convey their health messages on social media and create a certain perception of expertise that is perceived as a reliable source of information by the users. Frames highlight some parts of the information presented during the communication process and thus make the information more noticeable, meaningful, or memorable to audiences (Semetko & Valkenburg 2000). This process of framing increases the probability that audiences will perceive the information, create meaning, and store it in memory (Fiske & Taylor, 1991). Analysis of these frames shows how influence over human consciousness can be done by communicating and transferring information to that consciousness (Entman,1993). The framing effect is "one in which salient attributes of a message (its organization, selection of content, or thematic structure) render particular thoughts applicable, resulting in their activation and use in evaluations" (Prince et al., 1997, p. 486). Some of the salient attributes of the framed message could be viewed in the light of Pan et al. (1993) classification of framing devices. They introduced four categories, representing four structural dimensions of the discourse: syntactical structure, script structure, thematic structure, and rhetorical structure (see Appendix A for an illustrative model for framing devices' categories).

Syntactical structure refers to “the stable patterns of the arrangement of words or phrases” (Pan et al.,1993, p.59). This dimension views the way health influencers organize their messages by using a sequential organization of structural elements. It is structural in that its parts may be identified without a semantic analysis of the message.

Its elements in the messages of health influencers could be a sequence of organization such as an introduction, a body or a closure that has a specific power in conveying the message.

Script structure refers to “an established and stable sequence of activities and components of an event that have been internalized as a structured mental representation of the event” (Pan et al.,1993, p.60). It is associated with framing the message in the form of a story, narrative or personal experience. Script dimension of framing draws the audience’s attention to “drama, action, characters, and human emotions” (Pan et al.,1993, p.60).

Thematic structure is “a multilayer hierarchy with a theme being the central core connecting various sub-themes as the major nodes that, in turn, are connected to supporting elements” (Pan et al.,1993, p.61). It refers to the content theme, the central topic or idea that is conveyed in the message. The message could be discussing one topic or switch between different ideas and themes.

Rhetorical structure is associated with using different elements in framing the message to persuade people and convey an intended effect. Persuasion could be done by using specific stylistic choices in the discourse such as metaphors or catchphrases that capture people’s attention. This category includes multiple rhetorical devices that make the media message noticeable, influential and prominent.

Each of the four structures includes multiple devices that help structure the framing of different messages. Also, the four dimensions could overlap during the process of the framing analysis to produce a conceptual matrix that explains how frames are built to present or convey a particular message. For instance, “the script dimension could be structural in the sense of organizing events or actions, and the signifying power of its elements is determined by their locations along the syntactic structure, with

additional power coming from the uses of rhetorical and thematic structures” (Pan et al.,1993, p.63).

Fairhurst & Sarr (1996) suggest different elements that help frame messages such as metaphors, contrasting information, jargon, catchphrases, traditions, stories, and facts. Metaphors are figures of speech that describe an object by comparing it to another object that has something in common. Contrast is comparing two pieces of information to highlight a specific fact. Jargon refers to the use of scientific or professional words or expressions in a specific field while catch-phrases are phrases that capture the audience’s attention. Tradition refers to relating the information back to norms and everyday actions, while stories are narratives and experiences. Placing these elements under the four categories of framing devices could help analyze the frames used by the health influencers to convey their messages and present themselves as experts in their fields on social media. These elements are essential because they help construct the message, emphasize its meaning and alter its impact on the audience. The notion of framing in this study will provide an understanding of the relatively new phenomenon of health influencers on social media.

### **Expertise in Health care**

In order to identify experts from non-experts, Chi (2006) described ways in which experts excel and other ways in which they fall short. This research uses these ways to explore the expert non-expert characteristics that individuals who post health-related videos on YouTube possess or incorporate in their health messages to be perceived as experts. These ways could explain why some users succeed in positioning themselves as experts on social media. The ways described by Chi (2006) include generating the best solutions, detection and recognition, qualitative analysis, monitoring, strategies, and opportunistic. Experts are those who can generate the best solutions or

appear to be doing so. They can recognize features or parts of the problem that others could not detect; they analyze problems qualitatively in a thoughtful way and then present it by adding different aspects derived from their expertise. Experts also possess high self-monitoring skills as they can detect the status of their own comprehension. For example, numerous social media users analyze the feedback they receive from their followers and self-monitor their popularity and progress in acquiring more followers on these platforms. In fact, the nature of these platforms enables users to post comments and interact with other users who generate their own content. Thus, self-monitoring and feedback analysis skills could be significantly developed by users on social media websites. Besides, experts develop and use strategies or procedures that best suit a situation and have proved to be useful in a successful way. Finally, “experts are more opportunistic than novices; they make use of whatever source of information is available while solving problems” (Gilhooly et al., 1997) and also “exhibit more opportunism in using resources” (Chi, 2006, p. 24). For example, expert physicians always ask a lot of questions about the patient’s history and give their patient photo examples of similar cases to reach a proper diagnosis. Another example, some teachers use all available learning resources like video presentations and class simulations to maximize the learning outcomes and present their expertise efficiently.

Ways by which individuals will fall short in being perceived as experts include being inflexible, overconfident, misjudging one’s capability, glossing over and missing much of the details that could be very helpful in handling a situation. Experts were found to be less flexible than the novices (Chi, 2006) as they sometimes cannot adapt to “changes in problems that have a deep structure that deviates from those that are “acceptable” in the domain” (Chi, 2006, p. 26).

Furthermore, individuals fall short in being perceived as experts when their expertise appears to be domain-limited; their knowledge is only limited to one specific topic showing ignorance of other fields, or when their knowledge is dependent on context cues to solve problems and analyze situations. Also, bias could cause lots of errors and could destroy the image of the expert. For example, in medical contexts, experts were found to be affected by survival and morbidity rates of a specific case when diagnosing a similar one. In fact, specialists were found to be biased to their field of expertise when they generate a hypothesis or analyze something. Thus, there could be significant errors in their judgements as they base their decisions solely on what they have more knowledge about (Hashem, Chi, & Friedman, 2003).

To review and sum up the concepts that were discussed in the literature and theoretical framework, we can say that health information seekers exist among today's social media users; some of them are well equipped with e-literacy and health literacy skills that enables them to assess the health information they find online. Others do not possess these skills and they perceive the health information found online as credible and trustworthy, so they use it while discussing their cases with their doctors (Eysenbach, 2008).

The growing access to health information online can promote health awareness and create informed healthy individuals. However, if the quality of the health information or its source is poor or inaccurate, this can lead to the spread of misinformation (Eysenbach, 2008). In healthcare, information could potentially cause harm if it's out of context, therefore inaccuracy is no longer limited to the quality of health information, but it's greatly associated with how and who and why a health information is produced (Eysenbach, 2008).

It's difficult to distinguish authenticity of sources and authors due to the large volume of user generated health information posted by individuals with different levels and kinds of expertise and the sophisticated design of health content online by individuals that sometimes rival professional organization websites (Eysenbach, 2008). Determining expertise becomes challenging in a medium where anyone can claim being an expert as those who know more about something or have done something for so long could be perceived as experts (Nichols, 2017). Since the way the information is presented can greatly help determine expertise (Chi (2006), and that the source expertise and knowledge of content affect the perception of message credibility (Eastin, 2001), analyzing how individuals online use different frames to convey their message and present health information can determine perceived expertise and explain how they acquire credibility.

### **Research Problem**

Social media websites allowed people to communicate health information freely and openly. Although many health sites have a moderator who manages the conversation and encourages people to share, for example, their credentials, many others are not monitored. The interactive nature of social media websites which is based on user-generated content has encouraged the exchange of health information on these platforms and made it challenging to verify the credibility of it. Social media users are becoming more active in seeking health information and interacting with it. In such conditions, e-literacy and health literacy skills are essential to assess the quality of health information online and evaluate the credentials and the reliability of the sources of these messages.

Many people now act as health influencers who offer a different kind of expertise on health topics on social media sites. They are people with lived experience or physicians who act as experts on their own social media channels like Facebook,

YouTube, Instagram and Twitter; they have significant numbers of followers. Health influencers offer a wide range of different health tips and information related to fitness, alternative medicine, physical conditions, nutrition, sexual health, mental health, and general public health. Some of them profit by promoting health products and health apps or even get paid for their services. Many users perceive them as reliable sources of information and relate to them even though their backgrounds, credentials, and expertise can neither be clearly defined nor verified. They have established a salient relationship with their audience based on the expertise and values they include in their messages. This relatively new phenomenon is broadly spreading, and social media users are becoming more engaged with it. That is why more research is needed in this area to provide an understanding for the different kinds of expertise that could be found on social media and how health influencers frame their messages to communicate this expertise in the field of online health communication.

### **Research Question**

This thesis is seeking to answer the following research question:

Q.1 How expertise in health care is conveyed via YouTube?

S.Q What are the structural and rhetorical patterns that define different types of health care expertise on YouTube?

## **Chapter 3: Methodology**

This study employs a qualitative research approach by implementing case studies analyses. It highlights three cases of health influencers on YouTube as an example of a social media platform that is widely and actively used by internet users nowadays. YouTube as a medium has a great reach particularly in online health communication (Hoyt, 2015). Videos from the YouTube channels of the three selected cases are analyzed with the purpose of answering the question raised by this research. Analyzing videos on YouTube can provide a holistic view or image of the selected cases in terms of visuals, graphics, audio, text, verbal and non-verbal reactions. It also aids the analyst in recognizing the characteristics of different health influencers while performing their expertise.

### **Research Design**

#### **Analyzing frames**

In order to tackle the first part of Q.1, this study explores the different frames that individuals on social media, in particular those who publish videos about health issues on YouTube, use to convey health information. In media studies, there are two approaches to analyze frames in different media messages: inductive and deductive approach. Samatko (2000) explains the inductive approach as an approach that involves looking for frames in media messages with an open view, without having a predefined set of frames that the researcher looks for. The researcher can discover an open array of frames during the process of frames analysis, thus exploring the many possible ways of framing a media message. This approach requires a lot of work, needs to be applied on small samples and cannot be easily replicated. The deductive approach involves pre-defining a set of frames that could be used as variables during the process of content analysis.

This research uses a complementary approach that employs both inductive and deductive means of content analysis. Both approaches complement each other in order to explore frames found in videos of health influencers on YouTube. The analysis is deductive in the sense of defining a set of four frame categories and looking for them in each and every video under analysis. These four categories, according to Pan et al. (1993), are syntactical structure, script structure, thematic structure, and rhetorical structure. During the process of data analysis, the different emerging framing devices are placed under those four categories. The analysis also employs inductive reasoning as it attempts to reveal all possible framing devices that fall under the four predefined categories of framing discourse and could be found in the selected videos for analysis. This complementary approach value lies in limiting the dependence on loosely predefined preconceptions of frames and yet allows the research to recognize possibly new, unexpected or unique frames that could arise during the process of content analysis. This complementary reasoning highlights three particular cases depicting a growing reliability of many social media users on YouTube. The research provides a guiding platform for future studies in this area of interest.

### **Analyzing expertise**

To answer the second part of Q.1, this study explores the different indicators that health influencers on YouTube exhibit or show in their messages in order to be perceived as experts.

Several approaches for studying expertise were discussed in *The Cambridge Handbook of Expertise and Expert Performance*; Chi (2006) suggested a retrospective method that assesses how well individuals' outcomes or products are received by other people to identify whether or not these individuals are experts. For example, how often a composer's music is downloaded or heard could be examined to identify an expert

composer (Kozbelt, 2004). Similarly, applying such a method in this research context, many followers on active YouTube channels identify an individual that could be perceived as an expert.

The relative approach is another method to identify experts by comparing someone's expertise relative to someone else who has less expertise; in that sense, the more knowledgeable groups in a certain network would be considered experts, whereas less knowledgeable ones would be considered novices relative to them. A study by Horne et al. (2016) on expertise in social networks viewed how experts differ from other users on Twitter by analyzing tweets from three different groups: Experts, their friends (whomever the experts follow), and their followers. The study found that experts' followers were viewed as consumers of information provided by experts, whereas friends of experts were viewed as news sources that experts collect information from and produce their own opinion although they were not necessarily experts. A flow of information was described between the three groups as followers served smaller or different groups; experts sit between the two groups of users, those who publish and those who consume the information. In such complex networks, the relative approach of expertise identifies some groups to be experts in comparison to others who interpret or reduce expert's information and feed it to other less knowledgeable groups, thus considered experts by the latter group (Horne et al., 2016).

### **Qualitative design**

Heish and Shanon (2005) define qualitative content analysis as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (p. 1278). Denzin and Lincoln (2000) defined it as

“Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them” (p.3).

This research employs qualitative research approach in an attempt to explore the phenomenon of social media users tending to solicit certain individuals on social media who post messages about health issues. The qualitative nature of this research methodology provides a descriptive insight on how these health messages are framed and what indicators of expertise are exhibited within these messages in order to interpret their impact on different social media users. Caswell and Symon (1994) explains the characteristics of qualitative research as,

"A focus on interpretation rather than quantification; an emphasis on subjectivity rather than objectivity; flexibility in the process of conducting research; an orientation towards process rather than outcome; a concern with context— regarding behavior and situation as inextricably linked in forming experience; and finally, an explicit recognition of the impact of the research process on the research situation" (p.7).

According to Glaser & Laudel (1999), the basic proceeding of qualitative content analysis starts with adopting a theory to create certain coding agenda that could then be applied on a certain content to produce information that can be analyzed and interpreted. They suggest a strategy of "extraction" of relevant information from content (text) in a systemic way such as theory-based category system. This approach is open and can be changed during extraction when relevant information turns up but

does not fit into the category system. Both the dimensions of existing categories can be modified, and new categories can be designed. Since the category system can now be adjusted at any point of the analysis” (Kohlbacher, 2006, p. 17). In the context of this research methodology, similar proceedings of content analysis are considered, as a coding agenda based on Pen et al (1994) four categories of frames and Chi (2006) proposed indicators of expertise. These concepts are adopted to analyze the health messages of health influencers in their videos on YouTube based on an open extraction strategy that allows for the inclusion of unexpected emerging frames and indicators.

### **Content analysis of interactive media**

Internet advances and technology are rapidly replacing traditional media and modes of communication such as newspapers, magazines, and television with new forms of interactive media such as social media websites. Potter (2011) argues that “People are free to access all of these sites, use what they want, create their own messages, and make their messages available to anyone” (p. 213).

Interactive media allowed for a readily available content for analysis; traditional methodologies of acquiring and analysing media content is no longer a concern when analysing interactive media (Neuendorf, 2016). For example, interpersonal communications can now be studied via the vast available social media content published by these websites users rather than conducting a time and effort costly observatory of participants in the field. Neuendorf (2016) mentions an example that contrasts content analysis of traditional and interactive media,

“TV programs and commercials, once available to a researcher only if recorded at the time of airing, are now heavily archived for on-demand

online access and are immediately accessible even “on the run” via mobile devices such as smartphones and tablets” (p. 203).

Ramasubramanian & Martin (2009) argues that different types of interactivity on media platforms have different methods of analysing its content. McMillan (2002) suggests three kinds of interactivity: user-to-system interactivity, which involves interacting with a particular media system as in video gaming or using a search engine, user-to-document interactivity (When users interact with a media content online like viewing a website page content that includes hyper textual content with links or images), and user-to-user interactivity (when users interact with other user’s messages on a certain medium as on social network websites). This research reflects the three of them as it analyzes YouTube videos posted by users so it is a user-generated content designed for other users, so the interaction includes the content and its creators as well.

## **Data Collection and Analysis**

### **Units of analysis**

Videos are the unit of analysis in this research; content analysis of these videos is conducted in order to find the previously explained frames and expertise indicators to answer Q.1. An analytical framework is developed to aid in analysing these videos and draw conclusions based on similarities and commonalities that might evolve between the three cases (see Appendix B for analytical framework for each video and Appendix C for analytical framework for each case).

The four categories of framing devices suggested by Pan et al. (1993) are applied for the content analysis of the different frames used by the health influencers in their videos. The four categories are syntactical structure, script structure, thematic structure,

and rhetorical structure. During the process of data analysis, the different emerging framing devices are placed under those four categories.

The indicators of expertise that this research attempt to find are based on the previously mentioned conceptual framework of expertise and derived from the ways, described by Chi (2006), by which experts can succeed (generating the best solutions, detection and recognition, qualitative analysis, monitoring, strategies, opportunistic ) or fall short in being perceived as experts (domain limited; overconfident, glossing over, inflexible, context-dependent, biased).

The qualitative methodology of this thesis involves the analysis of the similarities and the common patterns that evolve regarding the frames used or expertise indicators exhibited by the three selected cases. These commonalities can provide a further understanding of the health influencers cases at hand and the nature of their communication process on social media with the users (see Appendix D for analytical framework for all cases).

Due to the nature of this study, YouTube videos can be deleted by the publisher or the website itself or edited causing a change in data; data is saved in an offline form during the process of collection to ensure the homogeneity and stability of it. The study relies on the data and numbers available at the time of collecting it.

### **Data collection (acquiring content)**

Social media has led to the creation of many forms of content that challenge the traditional notions of source and message content. In order to perform a content analysis on interactive media, analysts should define the different kinds of content available on social media sites. Neuendorf (2016) suggests three types of available content on

interactive media: user-generated content, user-selected content (including user-curated content), and interactive media output. He explains user-generated content (UGO) as the content created by the users of social media websites such as YouTube postings, Snapchat stories, Instagram photos and Vine Videos. This content marks a shift from corporate provided content to users provided content. However, these websites are usually owned by big corporates like Facebook and Google (Potter, 2011). While user-selected content (USC) refers to content created by a third party and posted by the users on social media websites like uploading a video from a television show on YouTube or a song made by a popular singer on SoundCloud; it reflects the choices that users make when they select a media a message and share it or repost it, rather than the message generation itself. This kind of content could be very beneficial in studies that explore users' trends in behavior and interaction on social websites towards different media messages and their assessment to this huge flow of information available on these websites. Interactive media output (IMO), "refers to content created as media consumers navigate or use interactive media" (Neuendorf, 2016, p. 211), such as web-surfing patterns and it requires more complicated methods of content analysis in comparison to the other two previously mentioned content types. This research highlights the message rather than the user trend or interaction towards the message; it adopts the UGC concept to analyse selected YouTube videos created by individuals who use YouTube.

Neuendorf (2016) suggests that, in order to acquire interactive media content for analysis, the analyst should differentiate between two Web 2.0 content types; Social network sites (SNS) and non-social network sites (non-SNS). Boyd and Ellison (2008) explains that SNS are websites that allow users to create public or semi-public profiles and develop connections with other users. They are not designed to reach a large audience, provide specialized privacy tools and emphasis on articulating networks and

connections within the user's pool such as Facebook (Neuendorf, 2016). The author argues that both SNS and non-SNS allow users to post UGC and USC, but non-SNS websites are designed to reach large audience lacking the emphasis on connections and providing privacy tools, YouTube, Twitter, and Wikipedia are examples of these websites. For the purpose of this research, the description of characters that distinguish the two types is to be re-considered as in the context of this research; YouTube is argued to be an SNS. Based on the previously mentioned definition and characteristics of SNS, YouTube design indeed allows for large audience reach, but it also can provide privacy tools, it provides users a space of interaction by commenting and replying on other user's comments and following other users' channels and message them, thus developing connections. In addition, it is not accurate to claim that SNS like Facebook design does not allow for a large audience reach. In fact, recent statistics published about Facebook shows that while YouTube still boasts more video views than any other platform, Facebook is becoming a top player in social media videos scope, following YouTube in terms of video views (Banpna, 2017).

### **Sampling Strategy**

Sampling is a challenge that encounters the analyst while acquiring content on social media for analysis and it is the essence of generalizing the research findings (Neuendorf, 2016). Analyst creates sampling frames then select, find and archive the sample from an overwhelming pool of content that is readily available on social media. For example, in the context of this research, there are a tremendous number of channels on YouTube owned by individuals who generate their own content of videos for a wide public audience. Also, there are a lot of videos on these channels that offer a wide variety of topics and information about health issues. Li and Walejko (2008) proposed four sampling strategies for blogs and bloggers on the internet: self-selected or convenience

sample (which involves selecting cases of bloggers to explore like selecting a sample of participants in a research and interview them or give them a survey in attempt to answer a research question), sampling using blog hosts (this is achieved by choosing a certain website or blog domain like blogger.com or wordpress.com then selecting the population of the sample from there ), blog aggregators sampling (refers to using aggregators websites that act like internet search engine for blogs to collect content from different blogs such as Technorati, ALLTOP and Feedly), and sampling for ready-published lists of blogs (that involves selecting various blog based on a character that connects them such as discussing same topic for example ).

Sampling using blog hosts is the strategy implemented in this research to select three cases of Vloggers posting videos on YouTube as blog host (Vlog). One limitation to be considered while applying this strategy is that it has no inclusion of self-hosted blogs or websites owned by bloggers, in turn, affecting the generalization of the findings for other platforms. In addition, self-selected or convenience sample is used in the process of selecting three videos in each case for analyzing the messages in these videos. This method is time efficient and provides a lot of conveniently available content with low cost; however, there could be a possible bias in data gathering since some groups could be overrepresented or underrepresented (Eid, 2007).

### **Proposed sample**

In the light of the content analysis, three videos with the highest number of views and most relevant to the topic and purpose of the research are selected for each health influencer's YouTube channel for analysis. Selected videos with a high number of views indicate popularity and wide general appeal to the audience. Also, video topics were selected in accordance to three main health topics that health information seekers often

search for. The three topics are Skin related conditions, gastrointestinal tract related conditions, and sexually transmitted disease and sexual body parts related conditions. A video for each of the three selected health topics will be analyzed for each case.

The proposed sample constitutes of three cases of well-known YouTubers on social media that post health-related videos: Sandra lee, Dr. Mike Evans and Montreal Girl. Those three YouTubers were selected for this research sample based on having wide audience reach. Also, they represent different kinds of expertise found on social media as some of them have medical backgrounds while others do not, so expert- non expert communication concept could be assessed based on the difference of their credentials and backgrounds. The three selected cases present a diverse sample of health experts performing their expertise on YouTube. In addition, due to their success as YouTube health influencers, their reach expanded outside social media platforms to other traditional media sources. For example, Dr. Mike Evans was hired by Apple Inc. to manage their health-related applications and Dr. Sandra lee recently started her own show “ this is zist” on TLC cable network.

## **Background on the selected cases**

### **Mike Evans<sup>5</sup>**

Doctor Michael Evans has become a YouTube sensation since joining the platform in 2009. Over the past nine years, his videos have had over 17 million views

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<sup>5</sup> Dr. Mike Evans description and credentials are based on the following selection of articles and their publicly posted personal profiles on social media platforms:  
<https://www.youtube.com/user/DocMikeEvans/videos?sort=dd&flow=grid&view=0>  
[https://www.thestar.com/news/gta/2013/12/28/meet\\_mike\\_evans\\_toronto\\_family\\_doctor\\_and\\_youtube\\_sensation.html](https://www.thestar.com/news/gta/2013/12/28/meet_mike_evans_toronto_family_doctor_and_youtube_sensation.html)  
<http://www.macleans.ca/society/health/youtube-star-dr-michael-evans-on-common-sense-health-care/>  
<https://www.reframehealthlab.com/about/>  
<https://www.linkedin.com/in/michael-evans-b8100413/>  
[https://www.facebook.com/pg/docmikeevans/about/?ref=page\\_internal](https://www.facebook.com/pg/docmikeevans/about/?ref=page_internal)  
<http://stmichaelshospitalresearch.ca/researchers/michael-evans/>

and have gained him several awards. His videos feature his voice and a cartoon doctor explaining common medical problems. He calls it peer-to-peer health care. Some of his most popular videos have hundreds thousands of views; one of his most famous videos has over 5 million views. The duration of videos ranges from two to ten minutes.

According to his LinkedIn profile, Dr. Evans studied medicine at McMaster University. Before starting his YouTube Channel, Dr. Evans held several high-profile positions in Toronto including the Director of the Mini-Med School for the Public; a program that helped 3,000 people with no medical background listen to doctors and professors at the University of Toronto to increase health awareness. On the same year when he started his YouTube channel, Dr. Evans quit his position as the chief editor of the award-winning website; HealthyOntario.com. During his nine years of maintaining the YouTube channel, Dr. Mike chaired the Patient Education Committee, became a columnist for CBC and The Globe and Mail, and founded Evans Health Lab; a website that aims to communicate health information through design and infographics. In 2016, Dr. Michael moved to California to work as the head of the Special Projects, Health at Apple.

It is apparent that Doctor Mike's videos brought him worldwide fame and opened more opportunities. Evan's multilingual videos granted him entry into popular culture when a popular Netflix show, Orange is The New Black, mentioned one of his videos. This 9-minute video now has over five million views and is one of his most popular ones.

Mike tackles common health issues and discusses them in a chatty way that is easy to follow. Since starting the job at Apple, the frequency of posting on the channel has decreased as he started focusing on other projects with Reframe Health Lab.

Nonetheless, Dr. Evans is still arguably one of the most important health YouTubers in the world.

### **Sandra Lee<sup>6</sup>**

Doctor Sandra Lee is one of the internet's most famous dermatologists. After completing her undergraduate degree at the University of California, Los Angeles, Lee attended medical school at Hahnemann University and did her dermatology residency training at Southern Illinois University.

Known to the public as “Dr. Pimple Popper”, Lee’s YouTube success came years after she first started it in 2010. Dr. Lee’s rise to fame started with Instagram where 2.7 million people currently follow her. Lee posts videos of treatments and skin extractions, but since Instagram does not allow videos to be longer than a minute, revitalizing the YouTube channel made sense for the dermatologist. Lee has become a media sensation with a strong presence on all major social media platforms with over three million subscribers on YouTube and two million likes on Facebook, a crowd that the doctor calls “Popaholics.”

Although her website does acknowledge the educational factor of her videos as people learn about their skin and the reasons why these skin conditions occur, the

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<sup>6</sup> Dr. Sandra Lee description and credentials are based on the following selection of articles and their publicly posted personal profiles on different social media platforms:

<https://www.youtube.com/channel/UCgrsF4TYwmrV0QsXb8AoeHQ>

<https://www.metro.news/dr-pimple-popper-will-squeeze-you-now/838550/>

<http://www.drpimplepopper.com/about-dr-pimple-popper/>

<http://www.drpimplepopper.com/press/>

<https://shop.drpimplepopper.com/collections/skincare/products/dr-pimple-popper-acne-spot-treatment>

<https://www.facebook.com/DrPimplePopper/>

<https://www.instagram.com/drpimplepopper/?hl=en>

<https://www.skinpick.com/dr-pimple-popper>

<https://www.thecut.com/2016/03/sandra-lee-pimple-popping-dermatologist.html>

<http://www.dailymail.co.uk/health/article-3610307/Would-clear-skin-Watch-horrific-moment-Dr-Pimple-Popper-stabs-man-s-spots-blade-bleed.html>

website also stresses that people watch these videos because they are “satisfying.” Dr. Lee is credited by many for raising awareness about skin health issues, but she is also accused by others for using grotesque methods for the purpose of self-promotion.

After several years of making headlines and getting media attention, in 2017, Sandra launched a line of products. Her namesake skincare products vary from treatments to extractors and tweezers. Neither the effectiveness of the products nor the success of the line is public knowledge. Besides the skincare line, Sandra is getting ready to have her own television show.

### **Brittany Auerbach<sup>7</sup>**

In 2013, Brittany Auerbach started her YouTube channel; Montreal Healthy Girl. Today, five years later, Brittany’s channel has 115,925 subscribers and her videos have gathered over seven million views. Her videos about healing both physical and mental diseases naturally have caused a whirlwind by the public and media.

According to her website, Brittany suffered from several diseases including Interstitial Cystitis, IBS, severe acne, thyroid disease and cardiac arrhythmia and was eventually healed. These conditions are the reason behind both her blog and the YouTube channel. Brittany is a certified Naturopath, a certification she got online from

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<sup>7</sup> Brittany Auerbach description and credentials are based on the following selection of articles and their publicly posted personal profiles on different social media platforms:  
<https://montrealhealthygirl.com/services-2/>  
<https://www.youtube.com/watch?v=pqT898rVY28>  
<https://montrealhealthygirl.com/services-2/>  
<https://sciencebasedmedicine.org/true-believers-entrepreneurs-and-scammers-in-alternative-medicine/>  
<http://montrealgazette.com/life/urban-expressions/living-juices>  
<https://www.mcgill.ca/oss/article/quackery/cancer-good-thing-says-montreals-own-food-babe>  
<https://naturopathie.org/en/ainh/>  
[https://www.reddit.com/r/Interstitialcystitis/comments/41c89q/what\\_do\\_you\\_guys\\_think\\_of\\_montrealhealthygirl\\_do/](https://www.reddit.com/r/Interstitialcystitis/comments/41c89q/what_do_you_guys_think_of_montrealhealthygirl_do/)  
[https://www.instagram.com/montrealhealthygirl\\_n.d/?hl=en](https://www.instagram.com/montrealhealthygirl_n.d/?hl=en)

The International Association of Naturopathic, an anonymous institution that offers online-only programs for 1,500 dollars. The popularity of her videos comes with major public scrutiny from health professionals as well as some members of the public.

Brittany's belief that "cancer is a good thing" and that the body can self-heal any disease has faced varying opinions. Despite saying that modern medicine is wrong and that diseases can be "reversed", all of Montreal Healthy Girl videos have a disclaimer that reads: "Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition or to help you decide which treatment options best and safest for you!"

Besides her YouTube channel, Brittany maintains an Instagram account where she has 3,000 followers and a website. On her website, she offers a "healing program" which is only available by email. Brittany's requests the 350 USD payment before the beginning of the tailor-made program. [montrealhealthygirl.com](http://montrealhealthygirl.com) also offers some books written by Brittany as well as a "fav products" section where she makes a commission for sales through Amazon.

Brittany's understanding of cancer, as well as other diseases, has been labeled misguided by several professionals and she has been accused by many for attempting to profit off people who have serious diseases like cancer and are desperate for a cure.

### **Archiving and coding (Archiving interactive media content for analysis)**

The possibility of content changeability and updating is one characteristic that interactive media offers, and in turn, the archiving process is very essential (Eid, 2007). In the context of this research, YouTube channels and Videos can be deleted or edited (tags and subtitles on videos can be changed or edited. Also, videos themselves could be edited and re-uploaded on YouTube). As a result, all selected samples of videos are

downloaded and saved for analysis purposes. Moreover, screenshots of the three selected channels are taken to document the availability of these channels for public audience at the time of conducting this research. Acquired Content is then archived using cloud storage<sup>8</sup>; as the selected videos for analysis and the associated screenshots are downloaded from YouTube channels and saved on Google Drive account owned by this study researcher. This approach for content archiving facilitates content sharing and coding among multiple researchers.

For content analysis purposes, the discourse in the selected videos is transcribed via YouTube automatic transcription feature and downloaded for further transcription edits as the automatic transcription is not always accurate. Detected keywords are coded in an Excel file. In this research, initial codes are created based on the theoretical framework previously mentioned theory and its relevant research findings as guidance. Pen et al. (1993) four categories of discourse and Chi (2016) expertise qualities are used to label and categorize the data acquired from the selected videos for analysis. During the process of coding, similar patterns detected in the discourse of health influencers are grouped together and given a label that represents the theory four categories of framing discourse and the theoretical concepts on expertise. Hierarchical coding or tree coding is implemented as the data is coded into major groups (branches) and sub-groups (twigs). The major groups represent the four categories of discourse and, each major group is divided into a number of sub-groups that represent the framing devices emerging in the discourse and falling under each of the four major categories proposed by the theory. It should be noted that during the process of coding, an overlapping of codes could occur. In that case, overlapped codes are considered in more than one label or category.

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<sup>8</sup> Cloud storage is an allocated space on a huge remote computer server that users access via the Internet such as Dropbox, Google Drive, Microsoft SkyDrive, and Apple iCloud (Neuendorf, 2016).

## **Ethical considerations**

All acquired content for analysis in this thesis is publicly published on YouTube. These videos were published for public audience on this platform with the intent of wide reach. This study is based on researcher's analytical thoughts and reflection for the matter under examination. Thus, there isn't any kind of ethical consideration encountered regarding interacting with humans in interviews or any face to face interaction.

This study is conducted with the purpose of advancing in knowledge and education regarding the topic of Health influencers in the scope of health communication studies. The study does not encourage any kind of personal defaming or exploiting. The mere purpose of selecting these cases is constructing a deep understanding of the phenomenon of health influencers on social media; there is absolutely no intentions or plans of marketing in favour or against the selected cases.

## Chapter 4: Findings and Analysis

This chapter analyzes nine videos based on the methodology framework previously discussed in this thesis and they are directly or indirectly related to three categories of topics on health conditions. The three topics are Skin related conditions, gastrointestinal tract related conditions, and sexually transmitted disease and sexual body parts related conditions.

According to literature previously discussed, these topics are the most common topics that people search for online. Also, videos related to those three topics are found on the three selected channels, which helps the analyst to analyze the videos better and drive comparisons between the three selected cases results.

Title	Topic Category	Duration		Date of Publishing	Date of Last Access
<b>Case A</b>					
What is the Best Way to Treat Acne?	Skin	9 minutes	130,913 views 981 likes 28 dislikes	January 15, 2013	March 2018
Inflammatory Bowel Disease (IBD)	GIT	6 minutes 45 sec	211,049 views 1.5k likes 10 dislikes	June 3, 2013	March 2018
Should You Get the HPV Vaccine?!	STDs or sexual organs	8 minutes and 46 seconds	119,800 views 771 likes 98 dislikes	October 3, 2012	March 2018
<b>Case B</b>					
Naturally Heal all Viruses: HIV, Herpes, Epstein-Barr and more!	STDs or sexual organs	18 minutes and 34 seconds	935,481 views 25k likes 1.2k dislikes	November 9th, 2017	April 2018
The #1 Remedy for Sibo, IBS, Gerd and Candida overgrowth: you can't heal your gut without it!	GIT	9 minutes and 17 seconds	118,567 views 2.7K likes 78 dislikes	December 15, 2016	April 2018
Heal your psoriasis and eczema naturally in less than 30 days!!	Skin	15 minutes and 27 seconds	135,813 views 1.5K likes, and 123 dislikes	December 10, 2015	April 2018

Case C					
Removing Calcinosis Cutis: Pt.1	STDs or sexual organs	12 minutes and 14 seconds	3,100,782 views 21K likes 1.7K dislikes	January 9, 2018	April 2018
Tickle Liposuction by Dr. Pimple Popper: One of my favorite procedures to do!	GIT	19 mins and 43 second	474,303 views 3.5k likes 407 dislikes	August 5, 2016	April 2018
Two HUGE Dilated Pores of Winer!!	Skin	7 minutes and 42 seconds	13,515,749 views 49K likes 2.5k dislikes	May 26, 2016	April 2018

*Table 1 List of analyzed videos*

One video conforming with each category is selected to represent each health influencer expertise aspects in that specific topic. Besides, these three categories later helped the analyst to conclude the commonalities and differences between the three cases that emerged during the analysis.

This section will refer to each one of the three selected cases as “the speaker” in the video to facilitate the description of analysis. The video structure and organization will be analyzed first for each video to explain the central theme of the video and discuss the syntactical/script structures that organize it. Rhetorical structures and indicators of communicating expertise will be discussed afterwards to explain how the selected cases frame their expertise.

## **CASE A: Dr. Mike Evans**

### **VIDEO 1 - Skin related conditions**

This video falls under the category of skin associated conditions, under the title, “What is the Best Way to Treat Acne?”. The video is around 9 minutes about Acne Vulgaris treatment. According to the medical dictionary, Acne is a common skin disease characterized by pimples on the face, chest, and back. It occurs when the pores of the skin become clogged with oil, dead skin cells, and bacteria. The video has 130,913 views 981 likes, and 28 dislikes at the time of conducting this analysis (in March 2018).

## **Video Structure**

The main theme in the video is finding the best cure for Acne, which is also expressed in the video title directly. However, multiple different ideas related to the main theme are delivered by organizing the content in a certain way that prepares gradually for the main theme. This organization implies a typical rhetorical "*dispositio*" or structure that could be found in many rhetorical pieces. "*Dispositio*" is one of the five canons of classical rhetoric discussed by Aristotle and its defined as the process of arranging arguments in a certain way to deliver a message (Albaladejo,1993). The structures are organized in a way that switches the viewers' attention from one idea to another and connects the different aspects of the topic discussed in the video.

Firstly, the speaker starts with defining *Acne Vulgaris*; then he explains the severity and the commonality of the condition. The speaker uses the rhetorical fear device as he mentions the negative effects of the condition and how it affects someone's appearance. This strategy takes place at the very first minute of the video which gives the main theme some sense of importance and motivates the viewer from the beginning to pay attention. For example, the speaker used sentences like "it's damaging the quality of life," "it's a disease that makes people feel bad, often very bad about themselves," "it can scar for life."

## **Syntactic structures**

The speaker follows a rhetorical flow in his discourse to present the different ideas related to the topic at hand. He transfers from one idea to another in a very smooth and coherent way in an order that reflects a syntactical framing dimension. This dimension introduces the information in the video gradually in a very logical order to prepare for better viewer understanding of what follows.

The speaker mentioned the idea of consulting a doctor before introducing the different treatment options, and he used words like “First advice, see a doctor” (1:40); the order he used in this discourse emphasizes the importance of doing this step. It also shows how the speaker refers to other sources of expertise other than himself.

<p><b>Introduction</b>  “Hi, I’m Dr. Mike Evans and today my question is what the best way to treat acne.” (0:01)</p>	<p>Visuals:  The video starts with an illustration that represents Dr. Mike Evans face, then a red spot that represents Acne Vulgaris appears on his face.</p> <p>Text: A handwriting of the questions he is asking appears beside his face in a speech bubble figure.</p>
<p><b>Defining the condition and its severity</b>  “Acne Vulgaris scars teenagers everywhere, vulgaris sounds bad, but in fact, it’s an old word that means common, which acne certainly is.” (0:08)</p>	<p>A hand draws scared teenagers and sad teenagers that have acne on their faces.</p>
<p><b>The prevalence and commonality of Acne</b>  “Adults can get acne, about ten percent still have it at twenty-five, but almost all teenagers do get. . . It tends to come on earlier in women, but the dudes get it a little bit worse.” (00:59)</p>	<p>A drawing of a boy in front of the mirror with a sad face and red spots of acne all over his back, neck and face.</p>
<p><b>Treatment of Acne</b>  The Speaker Introduces this section first in a very open and transparent way that stands him out from other fellow expertise or resources online.  “Unlike most acne resources on the internet, I’m not going to offer you a hundred percent Cure. there is really no cure for acne; most of the therapies I’m going to discuss have about a 40 to 70 percent success rate.” (01:20)</p>	<p>Drawing of a laptop with the shadow of a person saying 100% cure.  Drawing of medication containers</p>
<p><b>Topical medications</b>  The speaker introduces a side idea on Topical medications to further enrich his explanation of different treatment</p>	<p>Illustrative scene of a teacher and students looking at information written on a</p>

options. “okay let's take a bit of a detour and do a topicals 101” (04:3)	board
<b>Treatment Cont.</b> “benzoyl peroxide or BP is first line here, and it's available over-the-counter at any pharmacy” (05:20)	Mirror reflection of a patient’s face full of red spots of Acne and a medication container is drawn beside it.
<b>Ending</b> The speaker ends his video by providing a free tool for his viewers to monitor their different treatment progress. “I've made a card to help you sort out all the different treatments it's free at my...” (08:20)	Credits are written at the end of the video A page dedicated to thanking the doctors who shared their medical advice A disclaimer to show the purpose of the video at the end

## Rhetorical structures

**Mentioning empirical evidence** is another main rhetorical device that the speaker used many times by referring to research and statistics to strengthen the argument at hand and bring up the impression of expertise. For example, the speaker says “most of the therapies discussed here have about 40 to 70 percent success rate” (1;23), ”one review indicated a hundred and forty different treatments ”(4;01).

The speaker draws an **analogy** to justify the relevance of Acne as a health issue. For example, he highlights the disease severity by arguing that it’s like other diseases that commonly known to disturb the quality of life; “as chronic distressing conditions such as asthma, epilepsy or diabetes” (0:45). Also, he draws a **metaphor** to describe treating acne as playing basketball. Treating acne requires time, trying different combinations of treatments until figuring out which combination works best; just like basketball, “treating acne is a bit like playing basketball, you have to experiment with

various players and combinations, the score can fluctuate initially and it takes a little while to figure out who will win, but you cannot win if you stick with it”(8:07).

One main rhetoric style in the video is expressing the content through visuals and illustrations. The illustrations that accompany the speaker’s voice, not only provide a very strong visual aspect that engages the viewers, it's structured in the form of a story that describes the discourse. For example, at the beginning of the video, Acne Vulgaris is pictured in the shape of an unpleasant cartoon creature that is scaring teenagers (0;09) and appears whenever the disease the speaker mentions the name of the condition.



*Figure 1 Visual metaphor*

At (3;24) the speaker introduces a biology lesson that explains how acne is formed. He visualized this explanation by using symbols of different cartoon characters representing the plugging and the inflammation conditions.

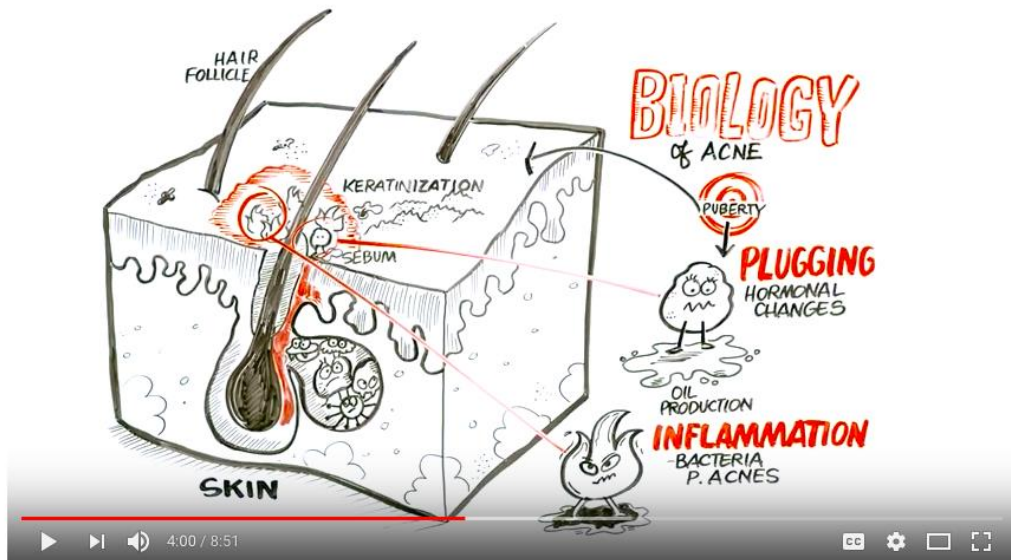


Figure 2 Visual illustration

The metaphor of the baseball player mentioned at (8;05) is also narrated in the form of a story with visuals.



Figure 3 Visual metaphor

### Communicating Expertise

Regarding communicating expertise, the speaker attempt to stand himself out from other sources of health information on the internet “ unlike most Acne resources on

the internet I'm not going to offer you 100 percent cure”(10:12). He expresses honesty and transparency in contrast to other online sources, which in turn encourage the viewers to perceive what follows in the video credible. The speaker also argues that he knows the kind of approaches that most of the viewers use to deal with the Acne problem “I bet I can guess the current approach some of you are taking who are suffering...” (1;53), this argument motivates viewers who are indeed following these approaches to relate to the speaker and thus, the speaker can acquire their trust and attention.

Some of the indications of expertise mentioned earlier in the literature review were flexibility and accommodating to different contexts; the speaker in this video indeed offered several treatment alternatives depending on each case needs and personal results achieved when applying one of the treatment options. Another indication is peer involvement in a certain field, in other words, experts would be involved in their field, well aware of research and discoveries in their domain, they would evaluate, refer or recommend other experts in their field. In fact, the speaker mentioned results of research on the topic at hand and commented on the validity of these results, “most research shows no connection but the trial quality... “ (2:47). The speaker highlights the role of consulting physicians and the importance of monitoring the treatment process with a professional, first advice is to talk to a doctor” (1;34),”repeat after me my doctor has seen more embarrassing things and whatever I show” (1;39), “so you need to be monitored closely when you're on this medication“ (7:04).

## **VIDEO 2 - GIT related conditions**

This video is placed in the category of GIT associated conditions, under the title “Inflammatory Bowel Disease (IBD).” According to the medical dictionary, IBD is a disease in which the lining of the intestine becomes inflamed. This video is six mins and

45 seconds that inform viewers about the condition of IBD. It has 211,049 views, 1.5k likes, and ten dislikes at the time this analysis was conducted (in March 2018).

### Video Structure

The speaker starts the video by introducing himself and the topic of his video. He explains in detail the two diseases that collectively cause that condition Crohn's disease and ulcerative colitis; then he mentions the specific and the general symptoms associated with them. The speaker then highlights the negative effects of the disease on the physical, emotional and social life. He lists the three effects according to importance in such order, as people normally are concerned with their physical appearance first then their emotions that affects their psychology and well-being, and finally the society and how other people see them. Finally, he expands on how to manage the condition and encourage viewers to read more about it.

### Syntactic structures

<p><b>Introduction:</b>  “hi, I'm dr. Mike Evans and this is a brief overview of a disease that attacks our guts called inflammatory bowel disease or IBD” (00:01)</p>	<p>Visuals:  The video starts with an illustration that represents Dr. Mike Evans face and a speech bubble drawn beside his face.  Text: A handwriting of the topic he is discussing in red inside the speech bubble.</p>
<p><b>Defining the Condition</b>  The speaker introduces the topic  “it is actually not a single disease but rather refers primarily to two related but distinct diseases.”(00:10)</p> <p>The speaker explanation of the condition helps the viewers in understanding the treatments that will be discussed later in the video.  “these differences lead to different outcomes and different treatments which I'll get to later.” (00:55)</p>	<p>A drawing of the human body showing illustrative arrows and text on the Gastro intestinal tract to explain the events that are happening and leading to the condition.</p> <p>Text: labels for the different parts of the digestive tract are written beside these parts.</p>

<p><b>Symptoms</b>          “The major symptoms of Crohn's do however overlap these include stomach pain and a change in bowel habits” (01:00)</p>	<p>A hand reaches out to the scene to put different cards that have drawings representing each of the symptoms the speaker is listing.</p>
<p><b>Investigations</b>          The speaker here explains the kind of tests that health care persons would perform to diagnose this condition          “To investigate the cause of your symptoms or gauge the extent of your disease...” (01:59)</p>	<p>An illustrative scene that shows a patient sitting with a healthcare professional.          Text: speech bubble beside the patient as he mentions his history          “And then back in 1926...”</p>
<p><b>Prevalence and commonality</b>          “IBD is usually diagnosed in young people, say 15 to 25, but it can appear at any time” (02:18)          “IBD affects about one in 350 people in most nations but it's more common in northern regions” (02:36)</p>	<p>Illustration of a globe with different labels and numbers that express the prevalence of the condition in different parts of the world and how common it is in different nations and races.</p>
<p><b>Causes of the condition</b>          The speaker explains why this condition could happen.          “we're not exactly sure why Crohn's happens. It appears that some sort of environmental factor in susceptible individuals...” ( 02:53)</p>	<p>Illustration of the gastrointestinal tract in the human body with little soldiers wandering in the GIT to fight and attack different targets causing inflammation.</p>
<p><b>Treatment and cure</b>          The speaker is honest towards his viewers by mentioning the fact that there is no specific treatment. However he then mentions how to manage the condition.          “currently there is no cure for IBD, but many of the treatments...or immune-suppressants are often used” (03:11)</p>	<p>Drawing of medication containers beside the mouth a human body and an arrow pointing towards the mouth to indicate an oral route of administration.          Text: Names of the medications are written beside this illustration.</p>
<p><b>Complications of the condition</b>          The speaker mentions some complications that could happen in this condition.          “in some cases, deep ulcers break through the wall of the intestine causing infection” (04:09)</p>	<p>Illustration of the colon and inflamed parts are drawn in red</p>
<p><b>Testimonial</b>          The speaker ends this section by providing a</p>	<p>The illustration of Dr. Mike’s face having a conversation with a patient.</p>

<p>testimonial of one of his patients. It provides a ray of hope and optimism for treatment.  “as one of my patients with IBD said to me with my ups and downs it was important for me to remember that things will return to normal. it may be a new normal but normal just the same” (05:46)</p>	<p>Illustration of a person from his back with a speech bubble beside him.   Text: testimonial is written in the speech bubble.</p>
<p><b>Ending</b>  The speaker ends the video by referring to the vast information that could be found online on this condition.  “there are some fantastic IBD resources out there to educate, learn and share with others” (05:57)</p>	<p>A page dedicated to thanking the gastrointestinal society and Crohn’s foundation of Canada. Logos and Contact information is also included.</p>

**Rhetorical structures** are observed in the video as the speaker uses oral and illustrative metaphors during the video to help communicate and simplify the mentioned facts. He describes the disease as a fire that flares up, and in the illustrations, he draws fire around the word IBD. The speaker explains the autoimmune reaction taking place due to the IBD condition in a simple way that implies visuals, “immune system then starts attacking healthy tissue inside the digestive system leading to the inflammation” (03:02). He illustrates the immune system in the form of soldiers fighting inside the gastrointestinal tract with weapons and attacking the healthy tissue of the digestive system leading to inflammation.



Figure 4 Visual metaphor

Another illustrative metaphor that strengthens and supports the argument that the speaker is making is observed at (5:00), as the speaker discusses the difficulty of navigating the risks and the symptoms of IBD while dealing with life stress. The risks and the symptoms are illustrated as the waves, and the self-informed individual is a ship captain that navigates through them.



Figure 5 Visual illustration

The speaker presents different unpleasant scenarios that those with the condition could be facing on their everyday life, “having to go to the washroom more than ten times a day or even talking about your bowels is you know I think it's challenging at any age” (5:21). These scenarios are also demonstrated in the illustrations showing the patient suffering in the workplace, school or home and how people react towards him.

### **Communicating expertise**

The main purpose of the video is informing the viewers about the IBD condition and not promoting a specific treatment or solution. The speaker clearly states that its a self-awareness video and used the word in different parts of the video, “self-awareness is also important when it comes to managing stress “ (4;54). For example, the title of the video is very simple, short and to the point, unlike other YouTube videos titles that claim to provide the best solution for a condition and only wants to capture YouTube surfers attention. The speaker shows honesty and transparency by mentioning that there is not an optimal treatment for the condition, “we're not exactly sure why Crohn's and you see happen (02:48)”, to support the the credibility of his argument.

He uses medical terms like fistula, and biologics, but whenever he mentions any of these medical terms he explains them; he doesn't just throw words in the discourse to look professional.

The speaker relates the facts that he mentions during the video to scientific evidence, and then at the end of the video (6;07-6;34). He mentions the availability of many online sources on the condition and encourages the viewers to read more about the condition and be self-informed, “there are some fantastic IBD resources out there to educate, learn and share with others that are where you are or have already been there” (05:57). He also refers to other experts in that field and motivates viewers to see them as

they will listen to their symptoms and understand it, “your care team will listen to your story ask if there is...” (02:04). He lists the various options of tests that health care team will run to investigate the condition. In doing so, he assures the patients and motivate them to see health professionals by informing them with what health professionals will do, “then investigate with things like blood tests stool samples and then likely examination of your bow..” (02:09).

The speaker refers to one of his patients who had an optimistic attitude towards the condition to inspire the viewers and give them hope, “As one of my patients with IBD said to me with my ups and downs it was important for me to remember that things will return to normal it may be a new normal but normal” (05:46). It also shows that the speaker is close to his patients; he remembers them and relates back to them. He ends the video by thanking the viewers telling them.

### **VIDEO 3 - STDs and sexual organs related conditions**

This video is placed in the category of sexually transmitted diseases and viruses, “Should You Get the HPV Vaccine?!”. The title is in the form of a question which grabs the attention of the viewers who browse YouTube videos for health tips and also keeps them attentive till the end of the video to find out the answer. The video is 8 minutes and 46 seconds, and it discusses the pros and cons of taking the HPV vaccine. According to the medical dictionary, HPV stands for Human papillomavirus, an infectious disease caused by a DNA virus causing genital warts. The video has 119,800 views, 771 likes and 98 dislikes at the time this analysis was conducted (in March 2018).

#### **Video Structure**

The speaker introduces the main theme of the video at the very beginning which is HPV vaccination, “because the question I want to look at today is should you or someone you care about get the HPV vaccine”( 00:29). The way the speaker introduces

the main theme of the video conforms to literature as health information seekers look for health information online for conditions that they suffer from or on behalf of others like their friends or relatives (Hoyt, 2015; Pew Internet & American life project, 2000).

The speaker presents the main topic of the video in the form of a story that has many aspects. He introduces the different aspects of the condition as characters that will be taking part in the story “this is a story that involves sex parts of your body we don't often talk about, human relationships, warts, our immune system and unfortunately cancer” (00:10). The story begins with “warts” which are one of the main characters of his story, “our story begins with the common wart “ (00:38).

### Syntactic Structure

<p><b>Introduction:</b> “hi, I'm dr. Mike Evans and today I'm reviewing the vaccine for the human papillomavirus” (00:01)</p> <p><b>Introducing the topic</b></p> <p>The speaker starts by introducing the topic in the form of a story with different role players. “it is a story that involves: sex parts of your body we don't often talk about, human relationships, warts, our immune system, and unfortunately cancer” (00:10)</p>	<p><b>Visuals:</b> The video starts with an illustration that represents Dr. Mike Evans face and a speech bubble drawn beside his face.</p> <p><b>Text:</b> A handwriting of the topic title in red inside the speech bubble.</p> <p>Drawn symbols representing the key players of the story</p>
<p><b>Complications of the Condition:</b> He explains Cancer as a complication of HPV “we have figured out that certain cancers such as cervical, vaginal, vulvar, anal, penile and even some throat cancers can be caused by HPV” (01:16)</p> <p>Then he provides proof by mentioning numbers and statistics “for example, 99% of cervical cancer is caused by HPV as well as approximately 90% of anal cancers and 35% of penile cancers what is</p>	<p>A list of different kinds of cancers written in a list with statistics of their prevalence beside each cancer type in red.</p>

<p>not...” (01:25)</p>	
<p><b>Treatment and cure</b>  He states the two vaccines for HPV and how they help in the prevention of HPV complications.  “Today there are two vaccines available for HPV; one is called Gardasil, and the other is Cervarix” (02:11)</p>	<p>A drawing of two syringes representing the two HPV vaccines available.</p>
<p><b>Prevalence and commonality of the condition</b>  The speaker mentions how common is that condition and its prevalence by numbers  “about one in a hundred and fifty women developed cervical cancer, and about 423 women die from it every year worldwide.” (03:00)</p>	<p>An illustration of a globe with labels of different geographical locations and numbers that represent the prevalence of the condition.  Drawings of many tombstones are spread in different location around the globe figure to express the death rate by the condition.</p>
<p><b>Vaccine Administration Cont.</b>  “the best time to receive the HPV vaccine as before a person becomes sexually active to prevent HPV infection before it happens...” (03:12)</p>	<p>An illustration of a female silhouette in front of an alarm to express the time factor of the vaccine administration</p>
<p>To help the viewer, take a decision on whether to take the vaccine or not, the speaker mentions the pros and cons of taking the vaccine.</p> <p><b>CONS:</b>  The speaker starts by mentioning the draw sides of the vaccine, however his draw sides facts are always followed by an argument that tends to be in favor of taking the vaccine.  “Australian review signalled a higher rate of anaphylaxis than we have typically” (05:34)</p>	<p>Illustration of a box that represents the vaccine reporting and different drawings are getting out of the box to represent the results.</p>
<p><b>PROS</b>  The speaker lists the different positive outcomes of taking the vaccine.  “We know that the vaccine significantly reduces the risk of early markers of cervical cancer as well as vaginal, vulvar, anal cancer” (07:00)</p>	<p>A drawing of a DR. Mike sitting on a table and three thinking bubbles.  The illustration of Dr.. Mike points to</p>

<p>At the end of this section, he between the positive and the negative outcomes of taking the vaccine.  “significantly reducing your one and 150 chances of getting cervical cancer versus a one and about 40,000 chance of anaphylaxis” (07:45)</p>	<p>the two sides of the table, one side presenting points pros and the other present the cons.   Text: pros and cons are listed on the two sides of the scene</p>
<p><b>Ending</b>  The speaker ends the video by encouraging the viewers to make a decision on HPV vaccine.  “I hope this information can help you make the best decision about the HPV vaccine” (08:05)</p>	<p>A page dedicated to thanking “the champion to control cancer” and the email address is mentioned (www.control cancer.ca)</p>

### **Rhetorical structures**

The speaker used the rhetorical devices of contrast and emotions to motivate the viewers to make a decision. First, he left the freedom of choice to the viewers and framed it in an emotional way that shows the urgency of the decision, “but when you see people suffering from cancer like I do and many of you have and having the opportunity to actually prevent it in the first place I think we have to overcome and get the discussion and the decision on the table” (06:44). Viewers would think about the people they care about and reject the idea of seeing them suffering from Cancer, and thus they will be motivated to make the decision. Secondly, he contrasted different statistics and facts in the same scene to further show the negative versus the positive outcomes of HPV vaccination, “ the vaccine is are significantly reducing your one and 150 chance of getting cervical cancer versus a one and about 40,000 chance of anaphylaxis” (7:51). The speaker suggests using reason and logic to decide, “it's tough to take a medication when you are healthy, but that is when we have the biggest opportunity to prevent illness before it happens” (08:11), “I think the better you understand something, the better your decision” (00:21).

## **Communicating Expertise**

The speaker encourages viewers to understand better to make a good decision, which conforms with the concept of health literacy; online health information seekers should have certain skills and a certain level of understanding of the issue at hand to be able to take proper decisions “I think the better you understand something, the better your decision and I say decision” (00:21).

Non-Bias is an observation of expertise that was previously discussed in the theoretical framework and is observed in the speaker’s attitude towards the main problem of the video. He shows the pros, the cons and all topic aspects of the topic leaving the decision to the viewer “now I hope this information can help you make the best decision about the HPV Vaccine (08:05)”, “Ultimately it's your choice in your call hope this helped” (08:16).

The speaker shows that he sees many patients who suffer from the late complications of the condition “when you see people suffering from cancer like I do” (06:44), which builds some trust between him and the viewers, as he has seen the worst outcomes of this condition.

Most of the speaker arguments are scientifically based; he refers to research and uses statistics in many parts of the video, “there is an emerging research on whether we should take the vaccine” (03:37). He assures the patient by providing an argument that expresses communicating expertise. He mentions that researchers are monitoring the negative side effects that might be associated with the HPV vaccine closely, “but we have a research system that is monitoring the use of the vaccine to see if there are other red flags we need to consider over time“ (07:42).

The speaker refers to international research which shows that he has a solid knowledge and well updated with findings from different countries in the world “the

cancers caused by HPV in Canada about one in a hundred and fifty women developed cervical cancer and about 423 women die from it every year worldwide this translates to over a quarter of a million deaths a year” (03:00), “as one Australian review signaled a higher rate” (05:31).

## **CASE B: Brittany from MONTREAL HEALTHY GIRL**

### **VIDEO 1- STDs and sexual organs related conditions**

This video is placed in the category of sexually transmitted diseases and viruses, “Naturally Heal all Viruses: HIV, Herpes, Epstein-Barr and more!”, An 18 minutes and 34 seconds video on different ways of healing viruses. This video is long in comparison to the other videos selected in this study for analysis. It's also considered long for a YouTube video, in general, that is showing a fixed camera scene and a speaker talking all the time. It has 935,481 views, 25k likes and 1.2k dislikes at the time this analysis was conducted (in April 2018).

#### **Video Structure**

Several framing structures were detected in that video that served in conducting the information and present the speaker as an expert. The main theme is curing and completely reversing viral diseases. The speaker starts the video with introducing the main theme which is the complete reversal of viral diseases then mentions the negative effects of these viruses “you know these really scary conditions like that everybody thinks are permanent such as herpes” (0:18), “these things that everybody is so terrified of” (0:34). The speaker occasionally talks about side ideas related to the main topic such as vaccination, immunity and the biology of viruses.

#### **Syntactic structures**

The speaker starts the videos with an explanation of what viruses are, what is their nature and how they are transmitted. Then, later in the video, she introduces her suggested cures to avoid having these viruses which are based on her own experience and the experience of other people of whom she knew.

<p><b>Introduction</b></p> <p>“Hey guys, so it's Britt from Montreal healthy girl” (00:02)</p> <p><b>Introducing the topic</b></p> <p>The speaker starts by describing the topic by using very appealing words to grab the viewer's' attention</p> <p>“today I'm doing a super exciting video. It's a very heavily requested video, and it might be a little bit of a controversial video. it's going to be about how to cure and completely reverse viral diseases and infections naturally.” (00:05)</p>	<p><i>Visuals and text</i></p> <p>The video does not include any Text or distinctive visuals</p> <p>The whole video features the speaker talking in front of the camera.</p>
<p><b>Defining viruses</b></p> <p>“viruses are complete opportunistic microorganisms which means they will only come out to play when your good bacteria is low...” (00:48)</p>	<p>The background setting is outdoors probably in the backyard of a building</p>
<p><b>Treatment and cure</b></p> <p>At this section of the video, the speaker lists her proposed treatment options.</p> <p>The speaker suggests avoiding vaccinations, and she provides different sub-ideas to support that argument</p> <p>“We want to fix the immune system which means if you're dealing with any kind of viral issues you want to stay far away from vaccinations” (02:35)</p> <p><b>Supporting arguments:</b></p> <p>“I know that this is definitely, you know, going to be controversial and of course I want you to do what is absolutely best for you, what makes sense for you, and what resonates with you” (02:41)</p> <p>“I just know that the amount of heavy metals and additives in vaccines...is serious” (02:52)</p>	<p>One static scene Setting doesn't throughout the whole video</p>

**Colloidal silver :** “finally I wanted to talk about the best anti-microbial that actually completely paralyze and block viruses ability to reproduce...” (05:22-05:33)

**Supporting arguments**

“in labs, in tests and studies, they have found that this literally stops the reproduction and kills and destroys the HIV” (06:20)

**Precautions and safety arguments**

“make sure you're making it properly...basically you want to avoid salt in your mixture, and the reason for that is that salt will change the way silver interacts and it'll cause clumping” (08:22)

**Oil of oregano:** “the next thing I'm going to recommend is oil of oregano” (10:16)

**Supporting argument – Personal experience**

“I also sometimes just buy new roots oil of oregano...and I play around with different brands you guys are welcome to shop around and find a good one” (10:45)

**Precautions and safety arguments**

“I've safely taken really large amounts of it and I found it to be really helpful with boosting the immune system”(11:55)

**Administration**

“do at least three drops of oil of oregano four or five times a day or you could do a larger dose like three” (11:34)

**Recap of treatment options supported by personal experience or personal bias arguments**

“Let me put together a protocol for you what I would do if let's say I caught HIV tomorrow or I got herpes tomorrow or whatever” (13:33)

“family members that have done this for herpes for themselves” (13:56)

**Ending**

She ends the video by repeating several times that she hopes that her suggestion would help her viewers and ask them to provide her with their feedback and comments.

“I really hope that this helps you guys please give me your feedback” (16:38)

**Emotional supporting argument**

“I know that with these particular conditions it's very easy to feel discouraged. it's easy to feel like this is a permanent problem. it's very scary to get stuck with a viral outbreak...”(16:41)

<b>Supporting Argument based on challenge</b>	
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The speaker supports her argument that these conditions could be completely healed by encouraging the viewers to do a research. “You don’t have to take my word for it like I said you can do your research you will find tons of information of people who have reversed their HIV and their infections with viruses naturally using these methods or similar methods” (18:06)	
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### **Rhetorical structures**

Rhetorical structures emerged in the video many times and they capture the expressive resources used by the speaker to appeal to the audience or make the content accessible. For example, at the beginning of the video the speaker applies a rhetorical strategy to present the main theme of the video by using words like “scary,” “permanent” and “terrified” to invoke fear and emphasize on the topic importance. Also, the speaker used meaningful words like “exciting,” “controversial” and “most powerful,” she repeated these words at different parts of the video to emphasize on the topic and grab viewers’ attention. Another device used for the same purpose is hyperbole which is defined as “an exaggeration or overemphasizing of a statement according to literary devices; “so we come in contact with them thousands of times a day, hundreds of thousands of times a day, they are on every surface of everything, they're on every person we encounter, they are by the billions on every hand that we shake” (1;59).

The speaker framed scenarios of different unfortunate events that any of the viewers could be facing “when your good bacteria is low, when you have a lot of parasites a lot of Candida, when you're in acidosis, when your blood volume is low and, you're dehydrated” (00:52). These scenarios strengthen the speaker’s argument as they motivate the viewers who experienced the mentioned conditions to imagine themselves in these situations and relate to it, whereas, those who are currently suffering from the

condition would perceive closeness towards the speaker as she knows what they are dealing with.

The speaker draws a metaphor by describing herself as a “science bug”, to give the impression of an expert, who knows a lot about science and does trials to reach scientific information, “if you're you know like me you are kind of a science bug and you want to know a little bit more” (07:01). This metaphor also gives the impression that the information mentioned by the speaker is scientifically based.

The speaker uses assertive expressions to emphasize the information she is presenting as a cure and it shows that she is overconfident about her suggestions supporting the main theme of the video. For example she said, “I've seen a really amazing success rate” (14:09), “I know for a fact that this is healable not just for my own experience” (14:13), “without a shred of a doubt that it is 100% healable” (13:46). “if done properly it's 100% safe” (08:47). The speaker communicates her expertise by using these expressions as well.

The speaker referred to some empirical evidence in that statement “in labs, in testing and studies, they have found that this literally stops the reproduction and kills and destroys the HIV and full-blown AIDS virus” (06:17). The speaker didn't provide the source of this evidence, but the wordings and the idea of referring to research itself help in persuading the viewers as it provides the assumption of expertise.

The speaker often refers to other people's experiences and her own experience to provide an evidence that these cures works and were tried on a personal level, “I know that to be true through my own experiences and those that I've witnessed “ (18:00), “ I have done this with Epstein-bar for myself I have you know family members that have done this for herpes for themselves“ (13:54).

She gives out the advice in her own pronoun, as this is what she will do herself in that situation “I would eat a mostly vegan diet I would be sure to make sure I'm supplementing”(14:56), “that I personally love and use and you can find amazing supplements”(15:17), “I would probably do all three of these things” (13:11).

Many framing structures overlap interchangeably to communicate expertise at the part (13:33) to (14:27); The speaker frames that part of discourse entirely as a story and she is applying a protocol that summarizes the main theme that she has been trying to communicate throughout the video. “What I would do if let's say I caught HIV tomorrow or I got herpes tomorrow or whatever...” (13:33).

### **Expertise communication**

There are many observations of expertise that emerge in different parts of the video; for example, while introducing the video topic the speaker said” it's a very heavily requested video” (0:6) to show that many people requested it a lot giving the impression that she has many viewers who contact her to request videos. She shows that she contributes a lot of information and videos to viewers “I have a ton of videos on that stuff so I'm not going to go too much into detail about that...you will find lots of free information on my channel about...” (04:34), “I'm surprised because I've been using it and making it for a really long time I use it intermittently when I need it”(05:24), “I have worked with numerous patients that are doing all kinds of viral” (14:00). Using hyperbole once more in framing these sentences and choosing words like “Tons,” “numerous” and “lots” gives the impression that she is an expert who has done something a lot for a long time.

The speaker attempted many times to express closeness and honesty towards the viewers during the video discourse; for example the honestly was repeated in “I would do honesty if you were trying to do a heavy viral powerful” (13:02), “so honestly I have

oregano right now this is not the brand I always buy” (10:27). There is a sense of closeness and honesty in the discourse that motivates viewers to relate with her and perceive her information as credible, “of course I want you to do what is absolutely best for you what makes sense for you and what resonates with you” (02:44).

The speaker mentions that she is at a health centre in Florida indirectly during her conversation to justify why she doesn't have a specific product with her, “I'm at the Hippocrates Health Center in Florida right now, and I don't have all my stuff like my little generators” (05:39), so this notice allows viewers to relate her expertise to the health domain.

Another notice is stating that she is not affiliated to a brand for the products she presents, and she is purely doing this for the best of the viewer, “you don't have to get this brand I'm not affiliated to them in any way it's just literally the colloidal that I have here right now” (06:05). Research on social media influencers and marketing suggests that audience responded positively to content that is sponsored as they relate more to the influencers who are not affiliated with brands (Gulamali & Persson, 2017). So that notice might as well encourage viewers to perceive her expertise and respond positively to the products and the information stated.

Many sentences ask for feedback in the video such as “please share any comments that you have about this video or tips and tools of things that you think also have helped you in your battle against viruses” (18:22), “so I really hope that this helps you guys please give me your Feedback”(16:36 ).

The speaker invites the viewers openly to take actions to find the truth of the information she provides and assess its credibility; so, in this way she could be perceived for her expertise that challenge their skepticism. “I am not making it out there's a ton of research online about it you guys are welcome to check it out you're also welcome to go

in a laboratory and do your own testing.....if you're really skeptical about it that's something that I have done a little bit of and I find it fascinating and interesting and it helps us to really discover the truth.” (06:32).

## **VIDEO 2 - GIT related conditions**

The video discusses some of the GIT<sup>9</sup> conditions, with the title “The #1 Remedy for Sibo, IBS, Gerd and Candida overgrowth: you can't heal your gut without it!”, it has 118,567 views 2.7K likes and 78 dislikes at the time of conducting this analysis (in April 2018).

### **Video Structures**

The main video theme is about SIBA and other related gut conditions. Some side/sub-themes are observed such as a stomach acidity test suggested by the speaker, the role of stomach bacteria, and diet recommendation to overcome GIT conditions mentioned in the video.

### **Syntactic structures**

<p><b>Introduction</b> “Hey guys so it's Britt from Montreal healthy girl” (00:02)</p> <p><b>Introducing the Topic and the related conditions:</b> “I'm just going to do a brief video today about you know I'm just going to kind of expand a little on a video that I did a while ago about SIBO “small intestinal bacterial overgrowth” and other kind of bloating digestive problems” (00:04)</p>	<p><b>Visuals and text</b></p> <p>The video does not include any Text or distinctive visuals</p>
<p><b>Explaining why SIBO happens</b> “why you can't get rid of your SIBO” (00:35) happening because you have too many microbes in the colon and too many</p>	<p>The background setting is indoors.</p>

<sup>9</sup> According to the medical dictionary GIT stands for gastrointestinal tract, a tubular passage of mucous membrane and muscle extending about 8.3 meters from mouth to anus including parts like stomach, small and large intestine and rectum.

<p>parasites and that is irritating your ileocecal valve (00:56)</p> <p><b>Reasons for low stomach acidity:</b>  “there's a lot of reasons for this <b>antibiotic</b>. they destroy your good bacteria which creates a natural acidity automatically” (01:52)</p> <p>The speaker then alternates between the effects of low stomach acidity and her explanation of stomach bacteria</p> <p><b>Effects of low stomach acidity</b>  “you're not producing enough stomach acid to completely turn all of your food to chime to liquid” (02:54)</p> <p><b>Nature of stomach Bacteria</b>  “those bacteria and things don't have a chance to inhabit your body when you don't break your food down fully” (03:46)</p> <p><b>Treatment of low stomach acidity</b>  “the main cure other than a healthy alkaline diet that heals your whole body strengthens your immune system you know rebuilds gut lining all of that the main way to get rid of SIBO is to fix your stomach acid” (05:42)</p> <p><b>Stomach acidity test</b>  “I also talked in my stomach acid video about a test you can do, the baking soda test so I'll mention it briefly” (07:04)</p> <p><b>Supporting Argument to introduce the test</b>  “there's nothing more annoying than watching a video till the end and they don't give you the solution I know it happens all the time” (07:13)</p> <p><b>Treatment of low stomach acidity Cont.</b>  The speaker goes back to suggest different ways of treating the low stomach acidity  “having ginger having you know, apple cider vinegar, taking probiotics, fermented food you're...08:22</p>	<p>Maybe at her place</p>
<p><b>Ending</b>  <b>Encouraging viewers to try out her suggestions</b>  “see how you feel with all the suggestions that I mad” (09:07)</p> <p><b>Supporting</b>  “try this out, you're not going to see a solution in one week, it might take a month to three months for you to really notice the difference in your healing” (08:52)</p>	

### **Rhetorical structures**

The speaker draws a metaphor describing the bacteria that cause problems to the viewers as demons, “they’re not doing it to be demons for you” (04:04). She explains the role of bacteria in the body by explaining a story of the bacteria that survive and reproduce “their job that's their role they're trying to survive, and now there's so many of them they'll start to multiply” (04:16).

The speaker imitates the sound of the burp that the viewer should be doing while performing her suggested stomach acidity test “you should be burping repetitively like b-uh b-uh like non-stop” (07:43); providing a better explanation and some simplification of the outcomes that could be expected when performing this test.

### **Communicating Expertise**

The speaker explains the abbreviations she uses like “SIBO, small intestinal bacterial overgrowth or overgrowth in the stomach” (00:46). She then mentions the underlying causes of these conditions to help viewers understand them “this is only ever happening for two reasons, so first of all it's happening because..”(00:50). She also uses jargon and scientific words like “ileocecal valve,” “electronic acid reflux and GERD”(0:26), that makes her sound like an expert.

The speaker shows that she is making it easy for the viewers to pull out information from her videos “in case you don't feel like checking out that video there's nothing more annoying than watching a video till the end and they don't give you the solution”(07:09); this also suggests that stating the solution in the video is the main goal she tries to ensure.

Again, as mentioned in the previous video, the speaker keeps referring back to other videos she posted and that she has done many of them “ I've talked a bit about like

diets and things like that in the other video” (00:37), I have a lot of videos about fermented food and probiotics...” (06:35). In addition, the speaker stresses the idea of closeness and honesty in her discourse so that viewers relate to what she is saying; she uses words like “honestly” and “truth” in “foods whatever it is honestly it could be so many different things but in truth the main reason” (02:43). The speaker also shows her sympathy towards the suffering of those who have these conditions and the suggestions made by her are to help them, “so I really hope that this helps everyone who's suffering out there, try this out..”(08:48), “see how you feel with all the suggestions that I made and trying a few of these things together, you should notice a huge difference really quickly hope this helps” (09:07).

### **VIDEO 3 - Skin related conditions**

This video falls under the category of skin associated conditions, under the title, “Heal your psoriasis and eczema naturally in less than 30 days!!”, It highlights the condition of psoriasis, which is a chronic, non-contagious disease characterized by inflamed lesions covered with silvery-white scabs of dead skin. The video is 15 minutes and 27 seconds, and it has 135,813 views 1.5K likes, and 123 dislikes at the time of conducting this analysis (in April 2018).

#### **Video structure**

The main theme in the video is healing the skin condition known as psoriasis. However, many side themes like Vitamin A and D deficiency, gut diseases, body minerals, liver cleansing and metabolism arise in the video.

#### **Syntactic structures**

<b>Introduction</b>	<b>Visuals and text</b>
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<p>“Hey guys so it's Britt from Montreal healthy girl” (00:02)</p> <p><b>Expression of Closeness</b>  “I think I had like insomnia or something, I had trouble sleeping I had like a very exciting conversation right before bed...”(00:08)</p> <p><b>Introducing the Topic and the related conditions</b>  The speaker starts by mentioning why she made that video giving the impression that it’s a requested topic by her viewers.  “I was doing going through some of my videos and there was some comments that people posted, and somebody actually asked me to do a video about psoriasis” (00:16)</p> <p><b>Personal experience argument to introduce the topic</b>  I had loads of acne and scars and cysts and rashes of all kinds and like so I mean I feel you” (01:15)</p>	<p>The video does not include any Text or distinctive visuals</p> <p>The whole video features the speaker talking in front of the camera.</p> <p>The background setting is indoors. Maybe at the speaker’s place</p>
<p><b>Causes of This Condition</b>  “so there's a few gut factors it could be contributing to why you have psoriasis in the first place” (01:48)</p> <p><b>The speaker alternates between the causes and her proposed solutions to motivate the viewers to avoid causes.</b>  <b>Causes :</b> “Poor protein metabolism...is one of the main factors in why we develop skin conditions in the first place like psoriasis” (02:26)  <b>Proposed cure :</b> dealing with psoriasis, I would definitely cut down on the amount of meat fish animal products dairy in your diet” (02:59)</p> <p><b>Causes :</b> “It could also be sugar metabolism issues. If you have a lot of yeast ... they can lead to chronic skin conditions” (03:53 - 04:16)  <b>Proposed cure:</b> “the first thing you want to eat if you're dealing with psoriasis is a lot of foods rich in vitamin A. you want to go hard on any orange food” (04:26)</p> <p><b>Confusion - bad preparation/ organization</b>  “let me see what else what else okay so bone broth is an excellent tool for replenishing minerals and helping to heal and seal the gut” (06:24)</p> <p><b>She refers to her videos as a supporting material that the viewers that can consult</b>  “I do have videos about that and I am due to make a more recent new parasite video as well” (09:17)</p>	

<p><b>Supporting Arguments</b>          “I am not remotely affiliated to any supplement brand I do not endorse a single product so every suggestion that I put on my entire Channel and it will forever remain this way” (10:15)</p> <p><b>Instructions on Proposed cure</b>          “make sure it's D3 and not D2 from natural sources and not synthetically derived...and see how you feel” (10:54 - 11:07)</p> <p><b>Supporting Argument based on the speaker’s personal experience</b>          “what I would do is, I've actually found a tanning salon in Montreal...I always feel really great” 11:35- 12:46</p>	
<p><b>Ending</b>          “so I hope that these tips and tools helped you guys” (13:25)</p> <p><b>Recap on proposed cures</b>          “you want to decrease acid food, increase alkaline foods... like vitamin D and vitamin A and all that stuff” (13:31-13:48)</p> <p><b>The speaker attempts to end her video by hoping her solutions would help the viewers and then she asks them for feedback.</b>          “so, I hope this helps have a great day and anybody dealing with psoriasis if anything is work for you please reach Out” (13:50)</p> <p><b>Proposed cure</b>  <b>Confusion - bad preparation / organization</b>          “Oh, before I end the video, I did want to talk about things you can use topically as well” (13:57)</p> <p><b>Ending Cont.</b>          “I'm sending my best, have a lovely day and I will talk to you, soon bye” (15:23)</p>	

**Rhetorical structures**

The speaker starts the video with a statement that induces some sort of closeness towards the viewers as she mentions she couldn't sleep well the night before “I went to bed really late I think I had like insomnia or something” (00:06). Also in another part of the video, she uses the same compassion and closeness concept towards the viewers; “and like so I mean I feel you if you have skin stuff don't be overly you know upset

about it you can definitely heal“ (01:23). People generally get convinced by things that they tend to agree with, and they tend to agree with things that they would like to hear; the speaker gives the viewers hope and an encouraging attitude that this condition could be treated so viewers who suffer from the condition would relate more to what she is saying. Speaker shows that she is spontaneous and close to the viewers at (02:26) as she corrects her pronunciation of the word “poor metabolism” many times in a funny way.

The speaker used a grotesque story to explain and strengthen her argument on gut parasites, “I mean I just had someone write me under one of my videos saying that they had you know tooth infection and all that stuff and where they had their kind of abscess or infection now they see like a worm there you know and this is very common” (09:06). Framing the argument in the style of a story presents the argument in a more interesting way for the viewers.

The speaker tries to use empirical evidence as a rhetorical element by mentioning that she has done her research before suggesting products or procedures “well I've done my research, and they have the lowest toxicity (10:36), “waiting to experiment on a few more little cleanses” ( 09:25). She shows that she supports research approaches by encouraging viewers to do their research, but she never mentions the sources of her information “of course you can you know do your research on vitamin d3 supplements “ (10:42).

### **Communicating expertise**

The speaker made many attempts to communicate her expertise and show that she is an expert who made many videos discussing different conditions and a wide base of audience who go back to her for advice “somebody actually asked me to do a video about psoriasis” (00:21), “you can check on the other video I have another video all about bone broth on how to make it” (06:36), “if you want to know more about probiotic

supplements “I do have a video I think it's called...” (7:36), “I just had someone write me under one of my videos..” (08:58), “I do have videos about that and I am due to make a more recent new parasite video” (09:17).

As mentioned in the previous video, viewers respond more positively to social media influencers who are not affiliated with brands (Gulamali & Persson, 2017 ); the speaker here stresses on that fact saying ‘I am not remotely affiliated to any supplement brand I do not endorse a single product so every suggestion that I put on my entire Channel, and it will forever remain this way is going to be not from affiliated work or anything’ (10:15). She also adds a rhetorical element that express closeness towards the viewers and honesty about her true intentions when she suggests these brands by saying ‘this is the product that I would buy, and that I would give my own children, my parents, my whoever else, you know my people, myself ’(10:28).

An observation of expertise that viewers can receive and relate to is noticed here “I’ve been doing this for many years and I go...” (12:31), she is saying that she has done these things for so long which indicates that she has quite well experience and supports her arguments. People perceive those who have done something many times of for a long time to be an expert on that thing.

In addition, personal experience is an essential element that encourages viewers to trust the speakers’ suggestions as the speaker faced the same circumstances herself, “I have personally not had psoriasis but I have every other skin element, even pretty much imagine I might get it even if had psoriasis but it was always diagnosed kind of as eczema” (01:05). The speaker argues that even though she might not have the condition herself, she believes she had it, and she was wrongly diagnosed as eczema. She also mentions that she did this video because she has a friend and a boyfriend, who both suffered from the same condition. In other words, she is expressing her expertise by

showing that she has a lot of experience with that condition as she has been in close contact with cases before. “I’ve been meaning to do this for a while because I recently you know rekindled with a friend who is actually battling with psoriasis now as well and I also dated somebody like when I was young I think it’s my first serious boyfriend, and he had really bad psoriasis’ (00:26).

The speaker suggests a liver cleanse, but she adds that she is still doing experiments to verify the effectiveness of it as a cure. This argument gives the impression that she is keen on research and experimentation before suggesting cures and motivates viewers to perceive her suggestions to be more credible as it based on experiments “I’m just waiting to experiment on a few more little cleanses that I want to do between now and then to see what is most effective before I make my most recent parasite update” (09:25).

As usual, the speaker ends her videos with an invitation for the viewers to share their feedback about the video and the treatments that she suggested, “Let me know what works for you, let me know if anything else has as well” (15:13). Also, she shows she is open to new suggestions based on what worked best for the viewers and that she likes to learn new information, “Please share if you are dealing with psoriasis and something that’s worked for you, it’s always great to get new information” (15:19).

### **CASE C: Dr. Sandra Lee (AKA Dr. Pimple Popper)**

#### **VIDEO 1 - STDs and sexual organs related conditions**

This video falls under the category of conditions associated with STD or sexual parts of the body. It demonstrates removal of calcium deposits present in the scrotum of a case of Calcinosis Cutis Condition under the title “Removing Calcinosis Cutis: Pt.1”. According to the medical dictionary, Calcinosis cutis is defined as deposition of calcium under the skin that might be a result of chronic inflammation. As mentioned by Dr.

Sandra in the video, the patient has not been able to be involved in any sexual relationship due to his calcinosis cutis condition in the scrotum. The video is 12 minutes and 14 seconds and it has 3,100,782 views 21K likes and 1.7K dislikes at the time of conducting this analysis (in April 2018).

### **Video structure**

The video structure highlights the steps of the procedure the speaker is performing. The video starts with showing photos of the lesion that the speaker will be working on, then a disclaimer that explains the purpose of the video and then the procedure steps are demonstrated. She ends the video by showing the results.

### **Syntactic structures**

<p><b>Introduction</b> Sound: No sound</p> <p>The speaker used titles and photos at the beginning of the video to introduce the topic and the case that she will be operating on.</p>	<p>Visuals: The video starts with showing a zoomed photo of a scrotum that has lesions all over it.</p> <p>Text: Video title Part1: REMOVING SCROTAL CALCINOSIS CUTIS</p> <p>Labelled photo with an arrow pointing to a scar.</p> <p>Text: Hypopigmented scar where a lesion was removed</p> <p>Microscopic pictures showing the histological features of the lesion Text: Microscopic appearance of his tissue (calcinosis cutis )</p> <p>Text: You can see the calcium deposits...which are the darker pink/purple areas (That vary in size and shape )</p> <p>A legal disclaimer is presented to</p>
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	<p>explain the purpose of the video A watermark that represents Dr. Pimple Popper’s logo is present on the photos and stays on the very top right corner of the video till the end.</p>
<p><b>The procedure</b></p> <p>The speaker starts the procedure by explaining the lesion to the patient “These are called calcinosis cutis, okay? This means that calcium deposits really right in there” (00:56)</p> <p><b>Informing the patient</b> “I’m gonna just squeeze that one and see if we can squeeze a lot of that out” (01:12)</p> <p><b>Humble expert- the speaker changes her technique to accommodate to the situation</b> “I don’t know about whether this is the best way to do it because we might not get rid of the whole thing” (01:49)</p> <p><b>Maintain a personal/casual conversation with the patient</b> “He said he had these since eighth grade, that’s gotta be very tough meeting girls and things like that, right?” (02:37)</p> <p><b>Acquiring patient’s consent</b> So, that’s what I’m gonna do here, okay? You’re okay with that right?” (05:19)</p> <p><b>Acquiring lesion history giving the impression that the lesion requires a professional or an expert to perform it.</b> “When you were in eighth grade or so, and they just slowly increased in number And then how did you?...Did you ever go to a doctor and have them looked at, or...” (05:38)</p>	<p>Visuals feature the procedure steps. The speaker hands wearing gloves are seen in the scene carrying out the procedure</p> <p>Grotesque imaging The speaker cuts into the lesion and drain the calcium deposits. (speaker press on lesions and a white viscous liquid gets out)</p> <p>Considering confidentiality and privacy issues Text : His voice has been muted, And I have included word he has said in blue text</p> <p>Text: TRYING TO DEVISE THE BEST PLAN FOR REMOVAL... (1:58)</p> <p>I THOUGHT JUST SQUEEZING THE CONTENTS OUT COULD BE GOOD ENOUGH, BUT..(2:11)</p> <p>Text (in blue)- patient: “I went to see a regular doctor, and they just gave me creams that didn’t work “ (5:48) Text (in blue)- patient: “No, I went by myself, my sophomore and junior year in school...” (5:54)</p>

<p><b>Mentioning procedure Progress</b>  “Alright, three down and how many more to go?”  (06:40)</p> <p><b>Procedure goals</b>  “My goal is at least Once we get on a roll, we're going to be faster...” (06:47)</p> <p><b>Acquiring feedback and ensuring patient satisfaction with the results</b>  “You don't think I need to talk anything more on them, right? You're okay with that?” (07:01).</p> <p><b>Procedure goals</b>  “Let's get this nice and clean. See how it's sticking to you” (07:11)</p> <p><b>The speaker Shows that this procedure is so important for the patient and that the speaker is performing a hard operation</b>  “God, you were probably dreaming of this day”  (07:29)</p> <p><b>Humble expert – involving the patient in the procedure</b>  “So, sometimes if I miss a little gap and you feel a little pinch or something, you just let me know”  (08:49)</p> <p><b>Humble expert- Self-criticism.</b>  <b>The speaker compares between her old and new videos.</b>  “Like, when I watch my old videos, I'm like, "Wow, look how nice and silent it is" Why am I talking so much now?” (09:55)</p>	
<p><b>Ending</b></p> <p><b>She is giving the impression that she is doing her best to get the best results</b>  “I want to just make sure it looks as good as it can be” (12:01)</p>	<p>Text: THANK YOU FOR WATCHING  @DR SANDRA LEE  (12:00)  A screen showing different social media accounts of Dr. Sandra Lee.</p> <p>Text: subscribe for more</p>

## Rhetorical structures

The speaker in the video used pictures at the beginning to illustrate the lesion then she shows the microscopic picture of the condition at hand which would only be understandable by medical personals. However, it motivates viewers to perceive her as a credible professional source. The speaker continues to point out to different histological features of the tissues that represent the calcium deposits, which wouldn't be of any benefit to public viewers who don't have a medical background. However, it could be a way that adds to the credibility of her work.



*Figure 6 Visual illustration*



*Figure 7 Visual illustration*

The Speaker tells a story of another patient who had a similar case, but he didn't want to reveal it or show it to her as his mother was present at the time. This story gives an impression of expertise as it shows that the speaker dealt with that case before. An ethical concern could be raised as the speaker is sharing another patient's information that could show that she is judging him because he was embarrassed to reveal his lesion in front of his mother.

The speaker draws a metaphor by describing the secretion coming out at the procedure as toothpaste, this way she also simplifies it to a very basic thing so that viewers can understand it. Another metaphor emerges that describes the lesion as a little bean (10:32), which also simplifies the meaning and adds a little sense of humour that distress the patient.

The speaker attempts to show compassion and understanding towards her patients by assuring them; this is observed when the speaker shows that she maintains a conversation with the patient and asks him at first if something hurts, although she is probably already aware of the answer.

The speaker tries to maintain closeness with the patient by asking him how he feels during the procedure. She asks the patient if he is ok in different parts of the video (11:10), (2:43), (5:23), especially whenever she cuts in the skin. She also maintains a casual conversation with the patient to sustain the closeness and assure the patient by distracting him. For example, she asks the patient if he meets girls or not and whether he is married or not (2:41). She apologizes to the patient that she speaks a lot, but she justifies it saying it's a way to distract him, so he doesn't feel pain (10:10). She makes funny statements to keep distracting the patient “like “it's so white calcium is so white you know” (4:19). This distraction technique is commonly used by doctors to drive patient attention away (Rivera-Rodriguez & Karsh, 2010). The speaker uses it to ensure that the patient doesn't feel pain or panic when seeing a grotesque aspect of the procedure especially this procedure is performed without anesthesia, so the patient is fully awake and aware of the events.

### **Communicating Expertise**

Medical ethics and professionalism that experts usually follow, can be observed in the final part of her disclaimer stating the content is not appropriate for all the audience, and in muting the patient's sound and adding subtitles that explain the steps of the procedure to protect the patient's privacy. However, in some parts of the video, the voice of the patient is still heard. Also, limiting the visibility of the patient's body by showing only the part that has the skin condition ensures patient's privacy and emphasise an ethical concept.

While performing the procedure the speaker discovered that the squeezing technique only is not enough to acquire the intended result, so she changed the technique and used another injecting something that she didn't mention what it was; it might be a saline solution to help dissolve the calcium deposits. Although she states in her disclaimer that the video is for educational purpose, she didn't mention in detail what she

is doing or using during the procedure. Also, changing from one technique to another shows the flexibility of the speaker and openness to accommodate her skills in other contexts. Finally, she shows that she is more aware now of the best technique to be used in that case. This trial and error technique is used by some experts to reach the best results and develop their skills as they learn more. A negative side could be showing the viewers or the patient that she doesn't know which is the best procedure which might not be assuring.

The speaker asks the patient if he has ever seen a regular doctor for his case, the patient responds “yes but she only gave me some cream that didn't really work” (5:45), which makes the speaker stand out from other regular doctors as their treatment didn't work, while her procedure is working well achieving satisfying results that are on screen shown to the viewers. Also, it's not clear what she means by a “regular doctor”; regular regarding what? it is confusing as it could be understood as doctors who are not dermatologists like her or regular doctors who don't use her exceptional or unique methods in treatment.

Seeking feedback and experts self-monitoring is another dimension of expertise observed in different parts of the video. For example, the speaker shows the patient how the lesion looks after removing some parts of it to assure the patient and ensure his satisfaction with the results (7:01). She also seeks feedback on her videos from the patient as she asked the patient if he watches her videos or not and if he likes them (11:34), which shows the viewers that she is keen on getting their feedback. The speaker casually criticizes herself as she says that she watches her videos and she feels that she speaks a lot (10:00).

In attempts to acquire the satisfaction of the patient with the final results, she states that he had this condition since the 8th grade so any outcome would be better than

the initial case. This statement supports the outcome of her work, as the lesion will always look better than the initial one, but it might not sound so professional of her.

## **VIDEO 2 - GIT related conditions**

This video topic is considered an aesthetic issue, however, “Liposuction can be used to improve the quality of life in patients who suffer from some medical conditions in addition to its use for cosmetic rejuvenation” (El Khatib, 2015). For example, apart from the aesthetic function of liposuction, its considered the most common procedure for adipose tissue reduction, treatment of lipedema and many chronic medical diseases worldwide (El Khatib, 2015). Accordingly, this video was selected to match the three selected categories of medical conditions with the videos available on each of the selected health influencers YouTube channels. The video topic is indirectly related to the category as the abdomen fat that causes central obesity is related in a way to digestion and metabolism taking place in the GUT and digestion organs.

The video title is “Tickle Liposuction by Dr. Pimple Popper: One of my favourite procedures to do! “. This video is 19 mins and 43 seconds demonstrating the procedure of liposuction but in a unique way as the speaker performs it without doing any general anesthesia. According to the medical dictionary Liposuction is cosmetic surgery performed to remove unwanted deposits of fat from under the skin. The video has 474,303 views, 3.5k likes, and 407 dislikes at the time this analysis was conducted (in April 2018).

### **Video structure**

The whole video only revolves around one **main theme** which is explaining the liposuction procedure. The video starts with a title written in a big font in the middle of the screen “Liposuction with no general anesthesia.” This subtitle attracts viewers’ attention as medical personals who are viewing this video for educational purposes will

be curious to know how she performs liposuction without general anesthesia whereas public viewers would be motivated to seek Dr. Sandra lee’s medical advice and consultation. The video is organized by the steps of the procedure the speaker is performing as the key theme of the video is performing this procedure without general anesthesia.

She starts the video by introducing the procedure and the patient as well, “this is my patient today, we are going to do her lower abdomen and her hips” (00:35). The speaker asks the patient to say hi to everyone (00:47) and mentions that the patient has done this operation before on her thighs; thus, developing a connection between the viewers and the patient. At the end, she shows final results of the procedure in the form of a “before and after” photos.

**Syntactic structures**

<p><b>Introduction</b></p> <p>Sound: No sound The speaker used titles and photos at the beginning of the video to introduce the topic and the case that she will be operating on.</p> <p><b>Introducing the procedure</b></p> <p>“This is my patient today. We are going to do her lower abdomen and her and her hips here” (00:31)</p>	<p>Visuals: The video starts with a video of Dr. Sandra and her assistant at the operations room in the operations medical attire carrying out the operation. And the title of the video is displayed.</p> <p>Text :Video title NO GENERAL ANESTHESIA TRUE TUMESCENT LIPOSUCTION ©DR SANDRA LEE (0:00)</p> <p>Photos showing a “before and after” appearance of the patient thigh.</p> <p>Text : THIS PATIENT PREVIOUSLY HAD HER OUTER AND INNER THIGHS TREATED WITH LIPO 0:08</p>
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	Same disclaimer and watermark as mentioned in the previous video
<p><b>The procedure</b></p> <p><b>Explaining the procedure</b> The speaker explains what she is doing in the procedure to keep the viewers, and the patient informed. “We're going to put a little numbing on the skin because I'm actually going to do what's called tumescent Infiltration with a torch or two” (01:08)</p> <p><b>Expressing expertise</b> The speaker is describing the feeling that patient should feel. She bases that on her experience with other patients “you don't really feel it, I mean, maybe it feels like pushing, but it doesn't hurt” (02:20) “sometimes people say it burns a little” (02:32)</p> <p><b>The speaker checks on the patient during the procedure</b> “are you okay? It's too strong. I could slow down” (02:55)</p> <p><b>It's not clear whether this explanation is for the assistant, the viewers or the patient.</b> “So we're going to put this in here and infiltrate we're going to make it real full here” (03:00)</p> <p><b>The sound is not clear, and the speaker doesn't continue her sentences as she gets busy with the procedure itself, so the true purpose of education is not totally clear here.</b></p> <p><b>A casual conversation with the patient</b></p> <p><b>Doctor-Patient dialogue (03:46)</b> Dr. Sandra: don't buy anything right now you might be over buying Patient: I always buy stuff like 3:00 a.m. Dr. Sandra: Oh, I do too, what size do you use Dr. Sandra: Yes, actually did you see this new thing. I heard on the news</p> <p><b>Doctor - Assistant dialogue (04:12)</b></p>	<p>Text: TODAY WE ARE DOING HER ABDOMENAND HIPS... TUMESCENT LIPOSUCTION! (0:20)</p> <p>Text: THIS IS TRUE TUMESCENT LIPOSUCTION UNDER LOCAL ANESTHESIA, ALONE! (2:29)</p> <p>the face of the patient is blurred while the patient is speaking (3:38)</p> <p>Text: AS YOU CAN SEE, THIS MAY LOOK TRAUMATIC, BUT THERE IS MIN TO NO DISCOMFORT (4:57)</p>

<p>The assistant: Which one dr? The Speaker: Let's do that one and then.</p> <p><b>The speaker assumes how the patient feels which gives an impression of the speaker's expertise.</b> How do you feel? You feel like you got a bunch of textbooks on yeah? (06:48) <b>Patient confirms:</b> Yeah, feels heavy</p> <p><b>Procedure instructions</b> "I'm going to take these out and I'm going to turn you on your side, okay, okay?" (07:00)</p> <p><b>Casual conversation</b> "he got mad because you thought that Kk meant like Kim Kardashian" (13:42)</p> <p><b>Procedure outcomes</b> "Tomorrow it's going to look really nice" (15:28)</p> <p><b>Expressing her techniques to stand out</b> "Sometimes that wears off and that's why I make my backup. We took photos too. So I could see later in case something rubs off, and I can't see where I was going or just in a general guideline" (17:58)</p> <p><b>Procedure Outcomes</b> "So I'm just trying to even it out. Make sure it's nice and contoured" (19:16)</p>	<p>Text: READY FOR THE FUN PART. LIPOSUCTION ©DR SANDRA LEE (10:07)</p> <p>Text: THIS... IS WHEN WE GOSSIP!! (Embarrassed emoji) ©DR SANDRA LEE (13:38)</p>
<p><b>Ending</b></p>	<p>The speaker ends the video by showing a "before and after" the procedure photos for the case.</p> <p>Text : BEFORE AND AFTER LIPO TO HIPS LOCAL ANESTHESIA ONLY! ©DR SANDRA LEE (19:24) Ending screen same as previous video</p>

### Rhetorical structures

The speaker uses illustrative pictures at the beginning of the video to show the outcomes of a previous liposuction procedure that she done on the thighs of the same patient. Also, at the end of the video, she shows photos that illustrate the outcome of the

procedure at hand on the abdominal and hips parts of the body. This technique of using photos that contrast between the before and after state of the patient attracts the attention of the viewers and motivate them to watch the video. Syntactic structures overlap here with this contrast rhetorical device, as showing these pictures at the beginning invokes viewer's curiosity to know how to reach that outcome, whereas showing them at the end highlights the efficiency of such a procedure and the great work done by the speaker.

The speaker draws a metaphor to describe the feeling that the patient will have, “she says it will feel like a beach ball” (7:11). Also, towards the end of the video, the speaker draws another metaphor by describing the markings that she has drawn on the patient’s skin to guide her through the operation as a topographic map. These metaphors serve as rhetorical devices that simplify the information and helps viewers to relate more to it and memorize it.

The speaker depended mainly on the conversation to present the steps of the procedure, very rarely subtitles were shown on the screen to present main steps or give an idea of what is going to follow. In fact, most of these guiding subtitles were casual ones that don’t present any of the medical procedures, for example, “the fun part will begin” (10:07), “when we gossip” (13:43). Although Dr. Sandra’s video is meant to be educational ones according to her disclaimer, the quality of the sound wasn’t very good, so it would be very hard for the viewers to follow up with the steps of the procedure. In fact, her description of the procedure events is always interrupted and not complete, as she stops a lot and hardly sustains the explanation. Moreover, in some parts of the video, the speaker spends a lot of doing the same steps without any further description of what she is doing, which could be boring for the public viewers. However, very few times the speaker explained in detail what she is doing and highlighted some of the tools she is using. For example, she showed the IV fluid that she is going to inject to the patient, and

she described the constituents of it. She makes some visual notices; she explains why the skin turned pale, as the IV fluid contain epinephrine which constricts the blood vessels.

### **Expertise communication**

Efferent patient-doctor communication is an indicator of expertise; patients trust their doctors when they can communicate with them openly and freely (Davis et al., 2006). In this video, Dr. Sandra Lee checks on the patient many times during the procedure (1:51), (2:57), (7:44), (15:41), which assures the patient and encourages the viewers to trust Dr. Sandra. It also shows that there is a strong communication maintained between the patient and Dr. Sandra; she asks the patient how she feels and to describe her feeling, then the patient responded saying she feels a tight little pressure” (2:35). Also at (6:54), the speaker asks, “how do you feel, I feel like you got a bunch of textbooks on yeah” then patient responds “yeah feels heavy”. Doctor-patient communication allows for the exchange of information between the patient and Dr. Sandra, which appears to be very helpful for her at the time of the procedures as she can modify her technique to best suit the needs and the feelings of the patient (2:43). For example, the speaker explains that she would do the infiltration more gently and slowly if the patient feels a burning sensation which shows that Dr. Sandra is flexible with changing her techniques to accommodate patients’ needs and feelings. Also, the speaker asked the patient for her permission during the procedure before she inserts the third cannula (3:10) and she gives instructions to the patient to turn on her sides and how to do that (7:39). Finally, she thanks the patient for cooperating with her throughout the procedure.

Another aspect of patient-doctor communication is seen in Dr. Sandra’s efforts in maintaining a conversation with the patient during the procedure (4:26-5:14). This is the speaker’s way to distract the patient and build a conversation based on closeness; she

opens a casual conversation about shopping, Amazon and Kim Kardashian with the patient (3:46).

### **VIDEO 3 - Skin related conditions**

The video falls under the category of skin associated conditions with the title, “Two HUGE Dilated Pores of Winer!!”, The main theme of the video is the extraction of the Winer pores, which is defined as a large, solitary open comedones or blackhead according to the medical dictionary. The video is 7 minutes and 42 seconds; it has 13,515,749 views, 49K likes and 2.5k dislikes at the time of conducting this analysis (in April 2018).

#### **Video structures**

The video is structured in a very basic simple way like most of Dr. Sandra lee’s videos that always revolve around a procedure as a key element for the production. Syntactic structures in the video correspond to the steps of the procedure the speaker is performing. During these steps, many sub-messages could be noticed that shows patient-doctor communication and emphasizes Dr Sandra's main role in the procedure. As usual, she starts with introducing the procedure and the lesion that she will work on. Then she performs the different steps of the procedure then show the results of her work at the end.

#### **Syntactic structures**

<p><b>Introduction</b></p> <p>“then this one up here. We got a bigger one up here, too” (00:12)</p>	<p>Visuals: The video starts with showing a zoomed photo for a pore of Winer in skin</p> <p>Text :Video title          NOW THAT'S A          HOMOGENOUS DILATED          PORE OF WINER          ©DR SANDRA LEE          The speaker points out to the two</p>
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<p><b>Introducing the procedure or the lesion</b>  <b>The speaker speaks quietly then starts speaking more clearly and loudly when she knew that they started filming</b>  “Yeah, you start filming actually. This is truly a dilated pore I do believe you just like to grow these” (00:32).</p> <p><b>Doctor - Patient’s wife dialogue</b>  Dr. Sandra: your wife doesn't like to squeeze them obviously (00:38).  The wife: some people do so (00:47)</p>	<p>pores that she will be working on during the video.  Text: AND ANOTHER ONE TOO!!  @DR SANDRA LEE (00:16)</p> <p>Text: ALSO WILL BIOPSY THIS PROBABLE BASAL CELL CARCINOMA (TYPE OF SKIN CANCER) (0:19)</p> <p>Same legal disclaimer and watermark as mentioned in the previous video</p>
<p><b>The procedure</b></p> <p><b>Procedure instructions</b>  “Yeah?..Yeah, hold your wife, she can make sure you don't fall forward” (00:51)</p> <p><b>Checking on the patient</b>  “Make sure I'm not hurting you am I hurting you, you okay?” (01:03)</p> <p><b>Describing the lesion</b>  <b>The speaker is very surprised by how big the lesion is and that gives the impression that it's a hard procedure to stand out her expertise</b>  “Wow Look at that area there , that is a big blackhead you might have the award for the biggest blackheads. Oh my goodness” (01:34)</p> <p><b>Procedure outcomes</b>  <b>The speaker explains the outcomes and assure the patient about the results to ensure his satisfaction and understating</b>  “it will get smaller you know but at least it's open so that it's not going to really fill up you can clean that”</p>	<p>(1:37) the scene of extracting the first black head is repeated twice</p> <p>Text: TO PROPERLY “CLOSE THIS HOLE” I NEED TO</p>

<p>(02:00)</p> <p><b>Casual conversation</b></p> <p><b>Patient's wife - Doctor-Patient dialogues</b>  Dr. Sandra: He's so sweet. Did you say you were ninety?  heard you'd got grandkids that are in Harvard  Wife: we have a granddaughter. That's getting her doctorate in physical therapy</p> <p><b>Humble expert</b>  "I don't know if I can get this out of one piece" (04:19)</p> <p><b>The Speaker apologizes for hurting the patient and assures him</b>  "Okay, I'm sorry. I'm so sorry. I won't go over there. Okay. You okay now. Yeah" (04:26)</p> <p><b>Speaker comments on the lesion in a funny way</b>  "your clothes are going to fit you better now. This thing is like a hump on your back" (04:51)</p> <p><b>The speaker discusses the history of the lesion</b>  "I know you were kind of concerned about that one home being something" (05:16)</p> <p><b>Procedure outcomes - Positive description of the outcomes</b>  "wow, that one came out nice" (05:45)  "Feels better, look how much fun is that's going to be that's gonna be a lot nicer" (06:17)</p>	<p>EXCISE THE SKIN AROUND AND SEW IT CLOSED (2:14)</p> <p>Text: WE CAN DO THIS IN THE FUTURE IF HE WISHES, BUT THESE "HOLES" WILL SHRINK SOMEWHAT IN TIME (2:25)</p> <p>The scene of extracting the second black head is repeated twice (5:44)</p> <p>Procedure outcomes is featured visually as the camera zooms on the two extracted blackheads on the table (6:30)</p>
<p><b>After the procedure</b></p> <p><b>Demonstrating the significance and the necessity of the procedure outcomes</b>  "Petrified rocks at our body, I can't even push into that, look was compacted in there seventy years ago"  "Yeah, I want to show him, look at what came out of your back" (06:49)</p>	<p>The speaker hit the extracted blackheads against the table to show how big and hard they were.</p> <p>The speaker takes the two solid masses to show them to the patient</p>
<p><b>Ending</b>  "That was pretty amazing huh? Yeah, yes, All right,</p>	<p>Same as previous video</p>

we're good" (07:28)

### Rhetorical structures

The speaker uses illustrative methods by showing photos to demonstrate the condition that she will operate on during the video; The photos show two dilated pores, one in the middle of the patient's back and a second big one in his upper back. Showing these photos at the very beginning of the video (0:15) is a syntactic element that serves in grabbing viewers' attention and help explain what the main theme of the video would be.



*Figure 8 Visual illustration*



*Figure 9 Visual illustration*

In addition, she occasionally adds subtitles to further describe steps of the procedure to the viewers.



*Figure 10 Visual illustration*



*Figure 11 Visual illustration*

The speaker used many metaphors to describe the physical features of the pores and express that the patient had them for so long. For example, she describes the pores as “ his little friend” (1:24), as a stone” The black head is like a stone under there” (4:01), and then as a rock “It’s like a rock” (1:29), “This is one too is like a rock” (5:57 ), and finally as a pea “it’s like the princess and the pea, but he is not a princess” (7:00).

These metaphors not only helped in simplifying and conducting the discourse, but it was also funny in a way that it cut the tension of performing a procedure and provide some closeness between the speaker, the viewers, the patient and his wife.

The scene of the pores extraction is repeated twice during the video to provide an emphasis on how big and hard these pores were and thus, shows that the speaker has done a good job in extracting them (1:37). Then the speaker uses another metaphor to emphasizes once more on how big the pore was “you might have the award of the biggest black Head” (1:49).

The speaker uses contrast to express her expertise furthermore and how-how she did a great job in removing those two pores; she shows two photos of the pores next to each other and viewers can then compare between how it looks like before and after carrying out the extraction procedure.

### **Communicating expertise**

The speaker always tries to engage in a conversation with the patient to assure him by distracting him from the procedure itself and by building a solid communication with him. In that video, unlike the other two videos, the patient’s wife attends the procedure which adds another element in the patient-doctor communication process that takes place during the procedure. It also shows another aspect of Dr. Sandra’s style in communicating and dealing with patient’s relatives, “ obviously your wife doesn’t like to squeeze it” (00:43). She gives instructions to the patient and this time she includes his wife in the procedure as she “your wife can hold you to make sure you are not falling” (00:57).

Another aspect of patient-doctor communication is observed as Dr. Sandra attempts to reassure the patient as well as his wife and show to the viewers that she cares about the patient feeling and wellbeing. She asks the patient if she is hurting him at

(4:12), She also assures the patient's wife at (6:09) saying that the lesion area will heal from inside and it will get smaller. She maintains a casual conversation with them about their grandkids in Harvard (3:01).

Doctor-patient Communication is also observed as the speaker explains the steps of the procedure and what she is doing during the procedure to the patient and his wife. That shows that the speaker is close to the patient and keen on keeping the patient aware and updated on what she is doing. She was also making sure she is not hurting him at (4:00) and (1:01). Honesty and transparency were observed when the speaker apologized to the patient as she cut over an area that is not numbed and she said that she wouldn't go over it again (4:29).

## **Discussion**

Many kinds of expertise could be found on social media nowadays. This research selected three cases that represent a different kind of health-related expertise to explore the notion of health influencers. According to Gillin (2007), health influencers could be viewed as experts in their field, who could be researchers like Dr. Mike Evans, practitioners like Dr. Sandra Lee or Dr. Mike or people with lived experience like Brittany from Montreal healthy girl.

They presented different purposes for posting videos about health-related topics on YouTube and different styles of framing them.

Internet advancements have blurred the line between expert and peer to peer health information (Menefee, 2016). Social media has narrowed the gap between people and experts in health communication by providing organized, easy accessible and appealing health information, which made people believe that they gained enough information to make important decisions concerning their health (Nichols, 2017). Different patterns of organization, rhetorical structures and expertise indicators were employed by the three cases selected for the analysis purpose of this research to present their health messages in an appealing way. For example, different structures used by each case will be discussed as follows:

Case A - General Discussion on the Findings and analysis

### **Videos structure**

Dr. Mike Evans videos shows a very well organized and structured health messages as he presents the different ideas related to a certain health topic in a logical, coherent and interconnected way. Thematic and syntactic structures are prominent in the three videos that were analysed as he always highlighted one main topic in each video and framed it in an organised and concise way that keeps the viewers engaged and

doesn't let viewers get confused or lost while viewing the video. He prepares for the information that follows by explaining the root causes and the origins of these pieces of information first. For example, in Video 1 “What is the Best Way to Treat Acne?”, he starts with a biology lesson to explain the nature of skin before introducing the treatments to better understand the cure. “to understand the best treatments for acne we need to start with a biology lesson then a mere test then step up therapy I think if you comprehend the biology of acne it makes treatment a lot easier to understand” (03:16). In video 2 “Inflammatory Bowel Disease (IBD)”, the speaker differentiates between two key diseases that cause IBD and then he explains them in details before describing the symptoms or the treatments, “one is called Crohn's disease and the other is called ulcerative colitis” (00:15). In Video 3 “Should You Get the HPV Vaccine?!” , the speaker first gives a background about the HPV virus and what complications it could cause for those who are infected with it prior to going in details about the vaccine itself, “should you or someone you care about get the HPV vaccine, so let's start with some background” (00:36). He also explains the different kinds of HPV viruses before explaining the different kinds of vaccines, which helps in clarifying the kind of immunization one can get by taking each of the two vaccines available against HPV, “but the two that caused 70% of cervical cancer are strains known as number 16 and number 18” (02:21), “Gardasil protects against all four of these strains” (2:34).

Message credibility is affected by the expertise of the source and his knowledge of the content (Eastin, 2001). The analyzed syntactic structures in Dr. Mike Evans videos shows a rich, informative pattern as he mentions the different aspects of the condition he is discussing like its prevalence, severity, causes, treatment and complications.

### **Rhetoric structures**

Many frames were detected in the three videos that were selected and analyzed for Dr. Mike Evans. His style in the three videos is very engaging to the viewers as it uses a lot of visual illustrations to explain and simplify the scientific concepts. For example, using visual and metaphors to explain an idea and clarify it simply was noticed in all three videos. In Video 1, Acne itself was illustrated in the shape of a beast or monster that scares teenagers, and treating acne was visualized and explained as basketball match where different combinations of players try to set a goal. In video 2, there are different visual and oral metaphors describing the IBD patient as a ship captain navigating through challenges, and the immune system as soldiers fighting back in favour of the GIT. Dr. Mike always refer to researchers and empirical evidence when making an argument.

### **Communicating expertise**

Dr. Mike Evans puts a disclaimer at the end of each video that emphasizes the importance of reaching out to healthcare professionals and consulting them. It also highlights the purpose of the video which is education and self-awareness of the viewers to be able to drive a conversation with their physicians or health personals.

While analyzing his three videos, Dr. Mike showed different indications of communicating expertise with his viewers. For example, he refers to his peer healthcare professionals and their role, advice viewers to read more about the diseases, mention the pros and cons of the treatments he is suggesting, and finally, he calls for self-awareness.

### **Case B - General Discussion on the Findings and analysis**

Many common frames that communicate the kind of expertise Case B offers were detected in all three analyzed videos:

### **Videos structure**

The organization of the three videos analyzed for Brittany reflects a pattern that focuses on the notion of treatment or cure that the speaker suggests. She always highlights the cure theme and supports it with different arguments that stress on her expertise and personal experience. Newman (2014) describes an expert as someone who has relevant experience in something or who has done something for a long time even if they didn't study that field formally.

Brittany mentions a lot of side ideas that might not be necessarily closely related to the main topic in a way that might make the viewers confused. She speaks a lot and continuously without having any pauses or gaps between ideas, so viewers could get lost. For example, in video 3, she forgets to mention an important part, then she discusses it in different parts of the video. In video 1, the speaker keeps going back and forth discussing the same kind of facts and repeating them. Also, the duration of video 1 is 18 minutes which is relatively long compared to the other two videos analyzed for that case.

### **Rhetorical structures**

She doesn't use many medical words, most of her words are very general and basic that most people can understand and that could be coming from anyone not necessarily a doctor or a medical expert. However, she simplifies things and speaks people's language with very minimal jargon words, so viewers could be motivated to relate to her and perceive her kind of expertise. It corresponds with the notion of similarity of the source about the receiver when using similar language or having similar values. It's one of the factors of the source-attractiveness model described McGuire (1985) that help persuade the viewers.

There is no use of visuals in any of the three analyzed videos for that case; the speaker sit in front of her camera and starts speaking. Also, the setting of two of the analyzed videos was a house which is probably the speaker's place with a background of

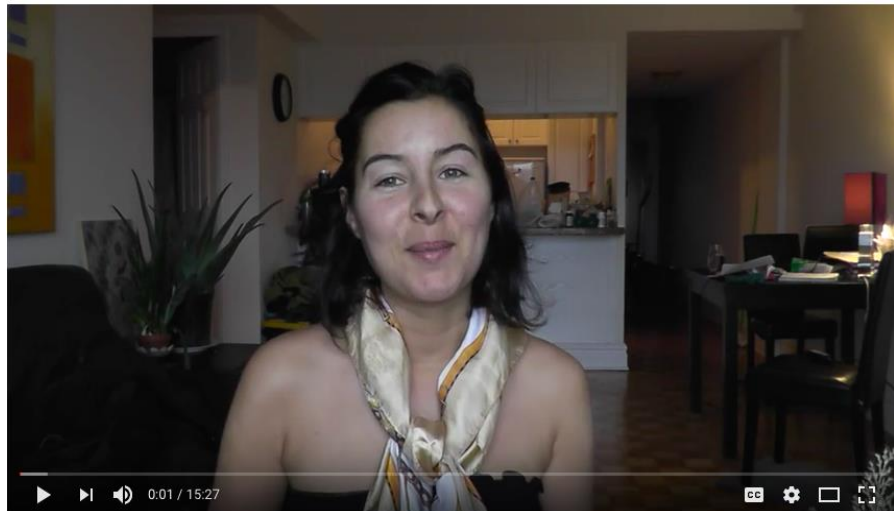
a couch or a kitchen, and the third was in the garden of a health centre in California as mentioned by the speaker. These settings do not reflect a professional expert environment.



*Figure 12 Visual illustration of Case B - Video 1 background settings*



*Figure 13 Visual illustration of Case B - Video 2 background settings*



*Figure 14 Visual illustration of Case B - Video 3 background settings*

### **Communicating expertise**

Hoyt (2015) suggested that almost one-fifth of social media users look for people who might share the same health concerns on social media. Brittany relates any condition she is discussing to her own experience or the experience of close people she knows like her relatives and friends. Brittany from MONTREAL HEALTHY GIRL presents the kind of expert that drives her expertise from her own experiences. She performs her expertise by relying on the idea of authenticity. Van Leeuwen (2001) describes authenticity as a faithful representation or construction that people perceive as true and of an authentic quality. In her videos, she suggests that she is authentic as she is just like any other viewer who suffered the same illness and went through the same experience. In all three videos, she states solutions that she has tried herself and worked for her or her friends or relatives tried. For example, in video three she says, “I’ve been doing this for many years and I go...” (12:31), she presents a” Self-referential kind of expertise that does not provide any external sources and does not refer to any peers; She is her source of expertise.

The expertise that represents personal experience offer them diverse opinions and expertise on their cases and provide emotional support (Cline & Haynes, 2001). Closeness towards the viewers is something she always relies on in all three videos to present her treatments, by expressing compassion sentiments to those who suffer from the conditions discussed and by sharing personal things about her.

She proposes solutions for the discussed conditions without any scientific proof; she argues that she has done her research and experiments to reach these conclusions. In fact, she proves her arguments based on either personal experience or other people's experience of which she knows about. She occasionally refers to laboratory results or research, in general, to support her argument without stating any source. However, this way of stating facts might contribute to communicating her expertise especially for viewers who are not concerned about the details and looking for a solution on their condition that someone has personally tried.

Abidin & Thompson (2012) stated health influencers put a lot of effort into maintaining their followers and impression of affection as they usually have hidden business interests like promoting certain products or purchase decisions. The speaker attempts to show her expertise to her followers and maintain their impression of affection by referring to her channel, videos and how many viewers rely on her health advice. She also referred many times to her work with different patients. Nielsen (2014) explains how people seek expert content when making purchase decisions; the speaker always stress on the fact that she is not affiliated with any brand and all the brands she is mentioning are her preferred ones.

Case C - General discussion of the Findings and analysis

### **Video structure**

Dr. Sandra lee's three selected videos generally all highlights one main theme which is usually the procedure or the technique by which she manages to deal with a skin lesion. Her videos are structured mainly around a certain procedure at hand. She always starts by introducing the case she is working with and the lesion she will be working on then she carries out the procedure step by step. During the procedure, she sometimes explains in detail what she is doing, and sometimes she shows what she is using closely at the camera to meet the educational purpose of her videos. She ends the video by showing the final result of the procedure. Syntactic structures emerging in her videos reflects almost the same pattern of organization and the same overlapping rhetorical structures in all three videos.

### **Rhetorical structures**

She uses many rhetorical devices like metaphors, contrast, illustrative tools like pictures and photos of the patient's lesions. Her metaphors were observed in the three videos very often to describe the conditions and the skin lesions to the viewers and the patient. She always adds a funny tone to her metaphors and conversations. She adds subtitles to explain the main steps of the procedures she is performing and photos of the lesions before and after the procedure to allow viewers to contrast between the outcomes and the initial lesions.

In reference to the visuals, Dr. Sandra's videos always show a very professional medical environment, for example, hospital settings or an operations room. When she appears in one of the videos, she would be wearing medical attire like a white coat or scrubs depending on the procedure, which could be considered as rhetoric to show the viewers her expertise and professionalism.



Figure 15 Visual illustration of Case C - Video 2 professional medical background settings and attire

Also, in video 1, She presents an expert who criticizes herself which could be seen as a rhetorical device to support the idea of a "humble expert", "i think i speak a lot" (10:00).

### **Communicating expertise**

Dr. Pimple popper starts all of her videos with a disclaimer that is directed for health care personals and public viewers as well. For health care personals, she states that these videos are for educational purposes and for creating an evidence-based<sup>10</sup> approach which is known to be a complicated and not easy process to be done by the sole effort of an individual. For public viewers, she strongly recommends not taking her words for guaranteed and that any of the procedures she is doing in her videos should be done by a medical professional. Viewers should consult a doctor in case of emergency.

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<sup>10</sup> **Evidence-Based Practice** is defined as, "Making a conscientious effort to base clinical decisions on research that is most likely to be free from bias, and using interventions most likely to improve how long or well patients live." (Mark H. Ebell, MD, MS, Professor, University of Georgia, Editor-in-Chief of Essential Evidence Plus)

According to Treem (2012) expertise are not something that individuals have, rather it an attribution that emerges due to social interaction and communication. In his study, physicians emphasised the importance of communicating properly and openly with their patients and doing that helped them acquire more experience and knowledge with these cases and similar ones (Treem, 2012). Dr. Sandra's videos highlights a solid Patient-Doctor communication aspects in reference to communicating her expertise. In video 3, she was communicating with the patient's wife as well and included her in the procedure. In all three selected videos she always start a personal conversation to distract the patients and assures them. She always exchange conversations with them to makes sure she is not hurting them and that they understand the instructions she asks them to do to help her perform the procedure. She also likes to inform the patients of what she is doing to keep them aware of what's happening. She occasionally explains what she is doing in details for the public viewers and the medical personnel viewers who watch the video for educational purposes.

### **Comparative analysis**

Several observations on the commonalities and the differences in the framing styles communicating the expertise of each of the analysed cases were detected and analysed.

#### **Video structures**

In terms of the structure and the organization of the videos analysed, Dr Mike evans presented the most organized and structured videos, whereas, Montreal Healthy Girl showed a lack of organization sometimes. Dr. Mike always started with introducing himself, then he introduces the main topic of the video, then he discusses all the different information that is related to the disease like root causes, prevalence, transmission and treatment. Finally, he thanks the viewers, ask them to take care, read more about their

conditions. The pattern of organization noticed in Dr. Mike’s videos is most likely the same for all videos except for slight differences between videos depending on the topic and the content that needs to be communicated.

Montreal Healthy Girl videos pattern of organization reflects a lot of arguments that support her treatments suggestions by expressing her expertise. The pattern sometimes tends to be spontaneous, perhaps this kind of spontaneity in mentioning the health information is a rhetorical strategy to express her closeness and honesty with the viewers.

Dr. Sandra lee’s videos on the other hand was structured around the procedure she is performing as a key element in the production. Her videos were usually organized in a certain pattern or scheme which did not show much difference from one video to another as the procedure is different. First, she introduces the lesion and the patient orally and by showing photos, then she performs the procedure while maintaining a solid communication with the patient. Finally, she will ask the patient for feedback and show the final result of her work and in some other videos she would show photos for the lesion before and after the procedure.

Dr. Sandra’s videos usually include one main theme since her videos usually demonstrate a condition related procedure, whereas some side themes emerge at Dr. Mike’s videos, but they are mostly coherent, interconnected and closely related to the main idea of the video so enhances the explanation. On the other hand, many themes emerge in Montreal Healthy Girl videos that are not interconnected at all and could mislead the viewers or confuse them.

Case A - Dr Mike Evans	Case B- Brittany from Montreal Health Girl	Case C - Dr Sandra lee
Organized structure	generally organized structure but sometimes	Procedure based structure and

	the discourse gets random	organization
One main theme	Many different themes	One main theme based on the Procedure
Structured Pattern or scheme that slightly differs in each video	Pattern or scheme of structure	Same pattern or scheme for all videos

*Table 2 comparison between the three cases in terms of structure and organization*

### **Syntactic Patterns**

Chi (2006) assumes that “differences in the performance of experts and non-experts are determined by the differences in the way their knowledge is represented” (p. 36). Ultimately, the three cases showed different ways to organize their videos, present their knowledge and communicate their expertise with each topic selected. For example, all three cases organized their messages within three main parts which differ in contents and way of framing; introduction, body and ending. For Dr. Mike the body organization differ from one video to another depending on the topic discussed, but it always highlights the main ideas that cover all the topic aspects and keep the viewers informed about the condition like prevalence, severity, causes, complications and treatment. Britt from Montreal healthy girl video body highlights her different treatment propositions supported by arguments that provide explanations, personal experience and emotional support. Dr Sandra highlights a certain procedure that she exclusively performs or an exclusively big lesion that she deals with. She discusses the procedure explanation, goals, outcomes and instructions in the video body which is reflected mostly in her communication with the patient or the patient relative.

Dr. Mike Evans	Britt from Montreal Healthy Girl	Dr. Sandra Lee
<p>Introduction</p> <ul style="list-style-type: none"> <li>- Introduce himself</li> <li>- Introduce the condition or Explain it</li> </ul>	<p>Introduction</p> <ul style="list-style-type: none"> <li>- Introduce herself</li> <li>- Casual conversation related or non-related to the condition</li> <li>- Introduce the condition</li> </ul>	<p>Introduction</p> <ul style="list-style-type: none"> <li>- Introduce the condition</li> <li>- Disclaimer</li> <li>- Introduce the patient or the procedure</li> </ul>
<p>Prevalence Severity Causes Complications Treatment</p> <p>Arguments: Information based Use of Rhetorical devices</p>	<p>Treatment and cure</p> <ul style="list-style-type: none"> <li>- Explanations and supporting arguments</li> </ul> <p>Arguments: Based on personal experience and experience of others Use of Rhetorical devices</p>	<p>Procedure</p> <ul style="list-style-type: none"> <li>- Explanation of procedure steps</li> <li>- Procedure Instructions, Goals and outcomes</li> <li>- Patient – Doctor communication</li> </ul> <p>Arguments : procedure exclusive techniques Exclusive big or hard lesion to deal with Use of Rhetorical devices</p>
<p>Ending</p> <ul style="list-style-type: none"> <li>- A recap that stress on the main idea.</li> <li>- Encourage viewers to learn more about the condition.</li> <li>- The speaker Thanks the viewers and refer to organizations related to the condition or helped in creation of the video</li> <li>- Video credits and dedicated thanks for those who shared with medical advice</li> <li>- Disclaimer</li> </ul>	<p>Ending</p> <ul style="list-style-type: none"> <li>- Hopes her suggestions make viewers feel better and always ask for Feedback</li> </ul>	<p>Ending</p> <ul style="list-style-type: none"> <li>- Showing procedure outcomes</li> <li>- Page with Dr. Sandra’s social media accounts</li> </ul>

*Table 3 pattern of organization that emerged in the syntactic structures of the videos of the three cases*

Rhetorical structures

All three cases used many rhetorical structures to simplify the information mentioned, persuade the viewers with certain suggested solutions and express a kind of expertise that each case offered. *Illustrative images and visuals* were detected in Dr. Mike's and Dr. Sandra's videos; however, they emerge the most in Dr. Mike videos due to the informative educational nature of them. Dr. Mike videos demonstrated many visuals that are simple in the shape of drawings or cartoon characters. His visuals also used different colors to highlight certain facts due to its importance or relevance to the topic. Dr. Sandra lee showed pictures of the lesions and the final results. Her videos could sometimes be considered grotesque expressions for the public viewer as it demonstrates very sensitive visual like extracting big pore of Winer in Video 3 or in Video 1 by showing sensitive parts of the body when extracting calcium deposits from a patient's scrotum.

Expressions of grotesque transparency can include several forms like displaying crude images and videos in case of Dr. Sandra Lee's three analyzed videos or telling a grotesque story in case of Brittany Montreal healthy girl in Video 3. According to Nahon-Serfaty (2017), grotesque transparency includes all kinds of shocking, deforming and disruptive images that are usually seen in many communication sources. The aesthetics of grotesque transparency could be a rhetorical factor that improves understanding of different public communication contexts including public health and health communication (Nahon-Serfaty, 2017). On the other hand, Case 2 videos did not show any kind of visuals; it rather showed the speaker in front of the camera at just one setting which is always the speaker's house.

When observing the three cases video titles, it was noticed that Brittany from Montreal healthy girl and Dr. Sandra's Video titles were created in way that would grab viewers' attention more than the ones of Dr. Mike.

In terms of references, Dr. Mike base his arguments on empirical evidence and scientific research as he always refers to the sources he uses either in the middle of the video or at the end of his videos. While Brittany from Montreal healthy girl occasionally refers to scientific evidence without mentioning the sources of the information as her health information and suggestions are exclusively based on her personal experience and the experience of others whom she knows or is in close contact with her.

Moreover, Dr. Mike usually encourages viewers to read more on the conditions using available online sources and most importantly seeking other doctors' advice. Dr. Sandra never referred to any scientific research in her videos, on the contrary she always tries to stand out from other doctors by adding unique techniques to her procedures, that stand far from the normal way of doing things. For example, carrying out a Liposuction procedure without general anesthesia, extracting huge dilated pores of Winer, and extracting deposited calcium in a case of calcinosis cutis instead of using topical medications as most other doctors do. Montreal Healthy girl never referred to any external source or any peers or health professionals. She only refers to her own personal experience and her own trails to acquire scientific conclusions.

Using metaphors has been noticed while analyzing the videos of all three cases. Most metaphors used by Dr. Sandra were made in a fun tone to ease the pain of the patients during the procedure, assure them and make them feel close to her. For example, in video 1, the speaker describes the lesion as a little bean and the secretion that comes out of it as toothpaste. In video 3, she describes the pores of Winer as the patient's little friend in a fun way and as a rick and as a stone to express the hard consistency of it.

Dr. Mike's metaphors were mostly informative to explain a scientific technique or idea in a simple way. Most of Dr. Mike's metaphors were visual as well, as he illustrated different drawings alongside with the discourse.

One of the major advantages of obtaining health information on social media is total anonymity which allows the search for sensitive health topics and interaction without the disconfirmation of face-to-face interaction (Cline & Haynes, 2001). When analyzing videos of conditions related to STDs or sexual organs, notion of anonymity was observed as it was noticed that each of the three cases used a different technique in communicating with the viewers some sensitive aspects related to these conditions. For example, Dr. Mike framed the information in the form of a story, “this is a story that involves sex parts of your body we don't often talk about” (00:10). Dr. Sandra kept the identity and the voice of the patient hidden to protect his privacy. In addition, the video was zoomed in so that the scene does not reveal too much of the patient’s genital organs. Britney from Montreal healthy girl focused on the sentimental aspect of the topic by giving hope to those who suffer from the sexually transmitted viruses and showing compassion towards those who feel bad about their sexual life.

Other Rhetorical devices that are unique to each case also emerged and have been discussed previously in each video analysis.

Rhetorical devices	Case A Dr. Mike Evans	Case B- Brittany from Montreal Health Girl	Case C Dr. Sandra lee
Visuals	Very frequent - Simple illustrations and drawings - Colors highlights certain facts	No visuals	- Illustrative photos for lesions - Before and after photo technique - Scientific/Medical photos used occasionally for lesions - Grotesque visuals
Empirical/scientific evidence	- Used often  - Scientifically based	- Used less often - Very general or vague in mentioning sources - Based on personal experience	- Never referred to any research.

Use of scientific language	Sometimes but always simplifies the terms and explain them	Less often	Very often with video viewers and less often with the patient.
Metaphors	- Very often - Visual and oral metaphors	Rarely Only oral	Less often Only oral

*Table 4 comparison between the three cases in terms of the rhetorical elements emerging in their videos*

### **Communicating expertise**

In attempt to determine who is considered an expert by the viewer, Newman (2014) states that expertise is far too subjective. For example, Nichols (2017) argues that people now who knows a little bit about something, consider themselves experts.

Communicating expertise is a critical factor to determine message credibility and acquire the viewers' attention. Perceived source experience, perceived knowledge and reputation of the source are factors to evaluate health information credibility (Avery, 2009). The three analyzed cases communicated their expertise in many different ways that was observed during the analysis. For example, many aspects of Patient-doctor communication are noticed in Dr. Sandra Lee's videos. Her videos feature highly advanced medical procedures that won't be very informative for the public viewers. However, it also shows them that she is a professional expert who possess great patient doctor communication skills. She presents the humble expert as she used self-criticism rhetoric in her video. She also presents the creative expert who stand out from other doctors in her field by introducing unique techniques in her procedures.

The videos of the three selected cases reflect strategic elements that serve the communication of their expertise and conforms with Chi (2016) explanation of ways of indicating an expert. The successful expert ways include: generating the best solutions, detection and recognition, qualitative analysis, monitoring, strategies, opportunistic. Experts falling short include: domain limited; over confident, glossing over, inflexible,

context dependent, biased) of showing expertise. In all three videos Dr. Sandra lee showed flexibility and accommodation of the situation which is an indication of expertise (Chi, 2016); she would change her technique during the procedure based on the on-spot needs and results of the procedure she is carrying out.

Dr. Mike Evans uses illustrations and visuals to communicate his expertise to the viewers. He features himself as a cartoon character and he speak to the viewers in these videos in his own voice. Finally, Brittany from Montreal healthy girl communicates her kind of expertise by conveying her personal experience and health preferences to her viewers.

Dr. Mike Evans presents the awareness expert who makes informative videos for the public. These kinds of videos would be ideal for public viewers who want to have a general background on their condition before consulting a physician or those who want to understand more about their condition to be able to maintain a conversation with their physician and communicate their concerns.

He shows much flexibility by presenting different options of treatment or solutions in his videos and then he gives the viewers the freedom of choice. He doesn't show any bias towards the information he mentions as he always mentions the pros and cons of any treatment he is suggesting, and he invites the viewers to read more about the condition and do their research. He also refers back to his peers and health professionals and invites the viewers to always consult a physician.

Brittany from Montreal healthy girl presented a self-referential kind of an expert as she based her information primarily on her own personal experience with the condition. She occasionally referred to the experience of some of her patients or her friends or relatives to support her arguments. Closeness, openness, honesty and emotional support were main elements she used in all three videos to communicate her

expertise and show the viewers that she is close to them and that they can relate to her.

Ultimately, as noticed in Case B, Closeness as a rhetorical appeal would be the best strategy to emphasize an expertise based on personal experience.

In all three analyzed videos, Brittany is usually biased towards her own personal experiences and suggestions. She shows moderate flexibility occasionally within the field of her own suggestions; in other words, she gives the viewers different options based on their needs and preferences. However, these options would still be falling under the same kind of treatment or health approach that she is suggesting.

Acquiring feedback is a characteristic of social media influencers who wants to maintain the relationship they have with their audience by obtaining their comments and feedback (Gillin, 2008). It was observed clearly in Dr Sandra's lee's videos as she always asks the patients about their feedback after the procedure. Also, in Britt's from Montreal healthy girl video patterns, asking for feedback and comments is always observed in her endings.

Communicating Exprise	Case A	Case B	Case C
Communicated kind of Expertise	Awareness expert (Self-informative videos)	Self-referential expert (personal experience)	Humble expert (self-criticism) Creative expert (stand out)
Key Elements of communication expertise	- Scientific based - Well informed - Strong visuals	- Closeness, emotional openness, Honesty	- Patient-Doctor Communication
Other indications of Expertise	- Refer to peers and Health professionals  -Flexible,	- Refers to personal experience.  - Moderately flexible within the	- Stands out from others  -Flexible, accommodating based on procedure

	accommodating  - Unbiased	field of her own suggestions  - Biased towards personal suggestions or significant other's experience	needs  - Moderate Bias towards her own procedural techniques
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*Table 5 key elements and the indications of expertise that emerged in the videos of the three cases to communicate their expertise*

## **Conclusion**

Nowadays online health communication as a field is growing rapidly. Many challenges face online health communication due to the availability of vast amounts of information and the wide outreach of this channel for communicating health issues. Message and source credibility are one of the main challenges arising on social media platforms due to the widespread of user generated content on these platforms. People can present their own kind of expertise and generate their own content online to communicate different health issues. Those individuals could be considered as health influencers by their followers as they drive an influence over their decision and well-being.

The learnings of this research could answer the research question and affirm the preliminary expectations that were set by the analyst; there are different kinds of expertise on YouTube, each expert possess strategic ways to convey their expertise. These ways were reflected clearly in the pattern of frames and structures that the three cases used in communicating the health messages and their knowledge in each of the analyzed videos. For example, a pattern of syntactic structures emerges in each case and overlaps with different rhetorical elements that provide an appealing and persuasive frame to the content presented by the three cases. This pattern is reflected by organizing the content in different sections of the video, where each section follows a certain arrangement and expand to include supportive arguments or different rhetorical elements.

These findings can further encourage individuals with different backgrounds who have an interest in communicating health messages to follow these patterns and frame structures as a guide to communicate their kind of expertise as well, whether their

expertise is based on education and reputable credentials or personal experience or a solid knowledge with a certain field. The findings suggest that in an environment like social media, the notion of expertise is no longer limited to those who have credible or certified credentials, individuals can successfully exchange information or ideas based on their backgrounds or biased preferences by employing certain frames or structures that expresses their expertise. Consequently, the notion of expertise is becoming very subjective and is open to the viewers interpretation and tendency to conform with the message source and perceive that source as an expert.

This research attempted to explore the different kinds of expertise present on YouTube as an example of a social media platform. Research detected three different kinds of expertise presented by those who have a medical background (Dr. Sandra lee and Dr. Mike Evans) and those who don't (Montreal Healthy girl). All three cases presented styles and frames in conducting their health messages. They also possessed different purposes for posting their videos.

First, Dr. Mike Evans, presented the doctor who makes informative health videos for the public with the purpose of self-awareness. He includes a lot of visuals in his videos and uses illustrations to deliver the information in an interesting, simple and fast way. Some of his videos are available in several Languages like English, French, Spanish and Arabic. Most of his videos were supported by credible health organizations that do work related to the specific topic he is discussing in the video.

It seems quite evident in his videos that he is not promoting his expertise for popularity or product marketing purposes as his framing style shows no purpose of achieving popularity or affiliating with any brand. This could be observed in his video titles, the kind of discourse he had, his video disclaimer and the content he presented in each of the three analyzed videos. His videos could be of interest for health information

seekers who are looking for advice or guidelines about common health issues or diseases like Acne, IBS, HPV vaccine. Also, interested viewers could be the ones seeking an explanation of their condition before seeing a physician or after to maintain a conversation with their physician and communicate their concerns.

Dr. Sandra lee presented the typical stand out expert that carries out many procedures and acquire its credibility from her patients and her unique procedures techniques. In her video disclaimer she states her videos are made for educational purposes, however she has a very popular website under her name that is linked to her YouTube Channel and sells dermatological products. Also, being popular on YouTube with millions of followers could help her greatly in acquiring a wide base of patients who would want her to be their dermatologist over many other dermatologists who might be as skilled and as good as Dr. Sandra, but unlike her they don't have wide exposure or visibility on social media. In addition, her videos that are said to be for medical educational purposes could also give her visibility within the medical community. Physicians and dermatologists who watch her videos would know about her and her techniques, thus there is a great possibility they will refer more patients to her. Her videos could be of an interest for those who are Medical students or professionals, which is already mentioned in her disclaimer as the purpose of these video. Also, her videos can attract the attention of public health information seekers looking for a specific procedure or alternatives that stand out from other dermatologists or those looking for a realistic portrayal of the conditions and treatment, even if they can be visually grotesque or disturbing.

Brittany from Montreal healthy girl states that her videos are for public benefit and awareness based on her own personal experience. However, she has her own website that features the same videos she publishes on YouTube, on her website she sells

products and allow the viewers to pay money so that she features their cases in her videos. Many influencers on social media make profit by promoting certain products in their videos or by selling their own products. Accordingly, there is a possibility of finding some individuals that might use social media easy accessibility and wide spread and health information seekers interest in actively seeking information to make profit or start a career path. Most of Montreal healthy girl videos are very biased to her own understanding and judgment of the different health conditions. She doesn't provide scientific based solutions and accordingly she might be giving false hopes for the viewers about their conditions and the possibility of healing their diseases. Her videos could be of an interest in health information seekers who are public health information seekers looking for an alternative treatments or self-induced treatments. Also, those who have very little awareness with health topics and conditions could show an interest in her health solutions and tips.

People who face health issues might be satisfied with the solutions they find online or get from the different individuals who post about health issues on YouTube and then they will not see a physician or just ignore their health problems. Consequently, defining credible expertise is a critical step in the process of health communication online.

Online health communicators and health professionals can benefit from this research findings by understanding different expert's communication strategies. The discovered patterns and the rhetorical elements could be employed in designing a high quality and informative health messages online.

### **Limitations and future directions**

This study is directed towards analyzing the messages sent by health influencers in order to provide an insight on the different communication processes that reflect

different expertise found on social media. The study had some limitations as it focused more on the message rather than the resulted effect of the message on audience perception and behavior. Further studies can use this research results as a starting point and explore the audience feedback and perception.

This study was only restricted to YouTube Vloggers who post health related videos, whereas many other health influencers could be found on different other social media websites like Instagram and twitter. Health information seekers look for health information on many social media websites and not only YouTube.

Due to the nature of this study, the time factor could be considered as a limitation; time is one of the variables that affect social media studies. For example, by time the number of view, likes, dislikes, popularity, Health influencers motives could change. Although this study tackled different variables related to health influencers motives, credibility and expertise, it did not consider the change in these factors within a time frame which could be a good starting point to develop an understanding on how these expertise change over time. In addition, monitoring variables over time frame can provide an understanding on health influencers commitment to sustain their presence on social media by analyzing the rate by which they update their YouTube channels and post new content.

The videos analyzed in this study are subjected to many changes that could be done by publisher at any point. The channel owner can delete any of these videos or edit them. For example, the title of one of the analyzed videos “Naturally Heal all Viruses: HIV, Herpes, Epstein-Barr and more!” by Brittany from Montreal Healthy Girl was changed in May 2018 to “The best way to boost immunity naturally and overcome those chronic infections!”. It was published on November 9th, 2017 on her YouTube channel and was accessed by the analyst of that research with the old title in December 2017. The

video had many views on YouTube and acquired a lot of popularity “935,481 views, 25k likes and 1.2k dislikes” as it is previously mentioned in the video analysis section. The reason for that edit in the video title is unknown and cannot be defined, but many Facebook posts that has negative feedback about the video was found by the analyst. Perhaps it was just a technique done by her to acquire many views with a controversial video title that will invoke the public viewers’ attention to argue against or in favor of the cures she suggested.

The study only analyzed three main categories of health topics which are skin related conditions, sexually transmitted diseases related conditions and GI tract related conditions. There are plenty of other topics that are discussed by several health influencers on social media. Analyzing the content posted by these individuals based on the content they post can greatly explain the expertise they present.

The study selected three cases who represent different kind of health influencers with different expertise and analyzed their content on YouTube. The study only analyzed the health content they posted on YouTube and did not expand on the content they posted on their personal websites. Which in fact could be very beneficial to know more about these health influencers and the kind of expertise they offer on social media.

Health influencers true motives could not be clearly interpreted based on the content analyzed as some claims they publish their videos for educational purposes and others for self-awareness purposes. However, Dr. Pimple popper for example has a wide array of products that she sells on her personal website. Further research can explore the idea of how being a health influencer could be a career path of a way of making profit.

## **Recommendations**

Internet as a medium for communicating health-related information is growing rapidly. The nature of social media platforms contributed to initiating a discussion, dialogue and an exchange of health information between users. Thus, a huge information overload is taking place on these platforms. People are bombarded with a huge flow of information whether they actively seek it or not. Butcher (1998) defined information overload as a big burden of large supply of information that might be either insignificant or relevant to the people's needs.

Society and medical organizations should act in a responsible way to deal with health expertise online that is strongly influenced by the performance of those claimed experts or advisors. It's important to consider putting strategies necessary to prevent potential damage for public and individual's health by health influencers who use their position in an irresponsible way and publish inaccurate health information. Close monitoring on the content posted by different individuals on social media could be a good strategy to deal with expertise online, especially the content that scores high in visibility and popularity. Health professionals and health organizations should post more content or support the credible content posted on social media to help health professionals and credible health expertise to stand out from the others who offer unreliable online expertise. Another strategy could be mobilizing more investments towards authentic health applications and filtering techniques like artificial intelligence to help people to navigate these highly fragmented landscapes of health expertise and filter out the harmful ones.

Health influencers on social media could drive an influence which could be good, bad or has no effect on the user's general health and lifestyle. This research provides an understanding of how health influencers on YouTube frame their messages and

communicate their expertise. It contributes to understanding the role different expertise on YouTube play in the growing process of online health communication.

Understanding how the health communication process takes place between different kinds of experts analyzed in this research and the factors that affect it in terms of structures, will help health professionals and communicators to develop the notion of health literacy online and add more precautions to the definition of health literacy. Users would be able to better assess the health messages they receive when they have deep insights on how the message sources frame these messages and frame their expertise. The more knowledge and understanding of a certain subject or phenomenon, the better audience and health professional can fight and detect the false claims of those promote unproven remedies and give false hope and inaccurate health information. The analyst views this research as a small contribution to the understanding of the domain of health communication that comprises further and vast information, processes, problems and phenomena to explore.

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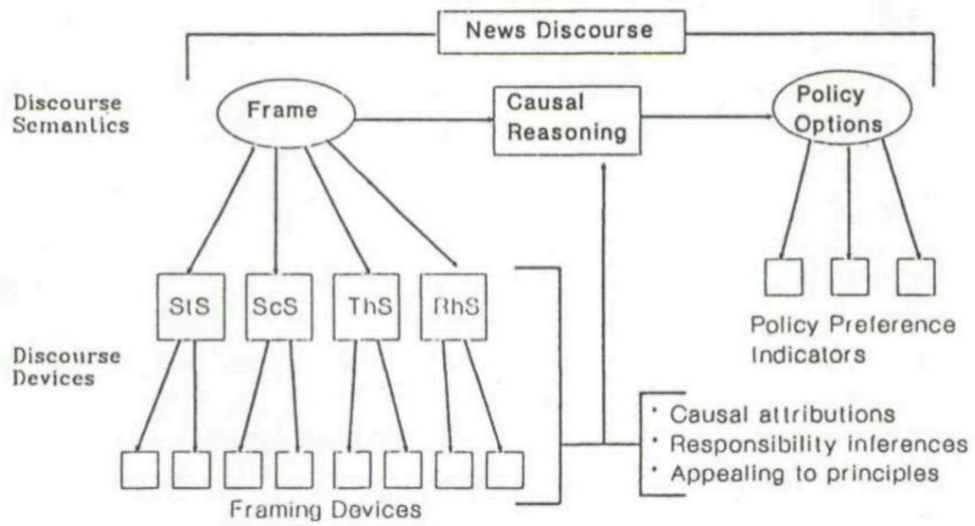
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## Appendices

Appendix A - Illustrative model for Pan et al (1993) framing devices' categories



Notations: StS - Syntactic structure; ScS - Script structure; ThS - Thematic structure; RhS - Rhetorical structure.

Appendix B - Analytical framework for each video

Video 1- Case A					
Framing structures	Syntactical structure (1)	Thematic structure (2)	Script structure (3)	Rhetoric structure (4)	General analysis for frames used
Framing devices					1+2+3+4 General analysis based on identified Frames.
elements of communicating expertise					

Notations: - Syntactical structure (1)- Thematic structure (2)- Script structure (3)- Rhetoric structure (4)

Appendix C- Analytical framework for each case

Case A				
	Video 1	Video 2	Video 3	General analysis in all videos
General Framing analysis				Common frames used in all 5 videos by that case if exist
elements of communicating expertise				

Notations: - Syntactical structure (1)- Thematic structure (2)- Script structure (3)- Rhetoric structure (4)

Appendix D - Analytical framework For all 3 cases

General analysis in all videos	Case 1	Case 2	Case 3	General analysis and Commonalities in all three cases
General Framing analysis				General framing analysis results and Commonalties for all 3 cases
elements of communicating expertise				

Notations: - Syntactical structure (1)- Thematic structure (2)- Script structure (3)- Rhetoric structure (4)

## Appendix E Script/Syntactic structures Case A - Video 1

<p><b>Introduction</b></p> <p><i>Sound:</i>  “Hi, I'm Dr. Mike Evans and today my question is what the best way to treat acne.”(0:01)</p>	<p><i>Visuals:</i>  The video starts with an illustration that represents Dr. Mike Evans face, then a red spot that represents Acne Vulgaris appears on his face.</p> <p><i>Text:</i> A handwriting of the questions he is asking appears beside his face in a speech bubble figure.</p>
<p><b>Defining the condition and its severity</b></p> <p><i>Sound:</i> “Acne Vulgaris scars teenagers everywhere, vulgaris sounds bad, but in fact, it's an old word that means common, which acne certainly is.”(0:08)  “Acne is a disease that makes people feel bad, often very bad about themselves...it's A disease that can scar for life but that could have been prevented. A disease that research shows us as damaging to the quality of life as chronic distressing conditions such as asthma epilepsy or diabetes...”</p>	<p><i>Visuals:</i>  A hand draws scared teenagers and sad teenagers that have acne on their faces.</p> <p><i>Text:</i> Hand writes main sentences said by the speaker in a speech bubble.</p>
<p><b>The prevalence and commonality of Acne</b></p> <p><i>Sound:</i>  “adults can get acne, about ten percent still have it at twenty-five, but almost all teenagers do get acne with one in five having a more severe case. It tends to come on earlier in women, but the dudes get it a little bit worse.”(00:59)</p>	<p><i>Visuals:</i> a drawing of a boy in front of the mirror with a sad face and red spots of acne all over his back, neck and face.</p> <p><i>Text:</i> no text</p>
<p><b>Treatment of Acne</b></p> <p>1-The Speaker Introduces this section first in a very open and transparent way that stands him out from other fellow expertise or resources online.</p> <p><i>Sound:</i>  “Unlike most acne resources on the internet, I'm not going to offer you a hundred percent Cure. there is really no cure for acne; most of the therapies I'm going to discuss, have about a 40 to 70 percent success rate.” (01:20)</p>	<p><i>Visuals:</i> Drawing of a laptop with the shadow of a person saying 100% cure.</p>

<p>2- The speaker then introduces the most effective treatment and adds clinical research to support his argument.          “We can ask what the clinical research says is the most effective of all these treatments and I think it follows our biology lesson” (04:09)          And that treatments are “developing a strategy to reduce plugging and minimize inflammation” (04:23)</p>	<p>Text: there is no cure for acne besides a drawing of a little beast that represents acne</p> <p>Visuals: drawing of medication containers</p>
<p><b>Topical medications</b>  <i>The speaker introduces a side idea on Topical medications to further enrich his explanation of different treatment options.</i>          “okay let's take a bit of a detour and do a topicals 101” 04:3          “topicals are medicines that you apply to your skin like a cream or a gel or a lotion” (04:39)</p>	<p>Visuals: illustrative scene of a teacher and a board with information and students listening</p>
<p><b>Treatment Cont.</b>  <i>The speaker goes back to the idea of treatment and mentions the names of the medications and explains their availability as over the counter or not.</i>          “benzoyl peroxide or BP is first line here, and it's available over-the-counter at any pharmacy” (05:20)</p>	<p>Visuals: a reflection of a patient’s face that is full of red dots representing acne in the mirror. A medication container is drawn beside it.</p>
<p><b>Ending</b>  <i>The speaker ends his video by providing a free option for his viewers to monitor their different treatment progress.</i>          “I've made a card to help you sort out all the different treatments it's free at my...” (08:20)</p> <p>The speaker ends his video by asking his viewers to take care.          “I really hope this helps take care” (08:24)</p>	<p><i>Visuals and text:</i></p> <ul style="list-style-type: none"> <li>- Credits are written at the end of the video</li> <li>- A page dedicated to thanks the doctors who shared their medical advice</li> <li>- A disclaimer to show the purpose of the video at the end</li> </ul>

## Appendix F Script/Syntactic structures Case A - Video 2

<p><b>Introduction:</b></p> <p>Sound:  “hi, I'm dr. Mike Evans and this is a brief overview of a disease that attacks our guts called inflammatory bowel disease or IBD” (00:01)</p>	<p><b>Visuals:</b></p> <p>The video starts with an illustration that represents Dr. Mike Evans face and a speech bubble drawn beside his face.</p> <p>Text: A handwriting of the topic he is discussing in red inside the speech bubble.</p>
<p><b>Defining the Condition</b></p> <p>The speaker introduces the topic by explaining the condition first.</p> <p>“It is actually not a single disease but rather refers primarily to two related but distinct diseases. 00:10. One is called Crohn's disease, and the other is called ulcerative colitis 00:15. the key differences are firstly the location of the inflammation and secondly the extent of the inflammation” (00:23)</p> <p>The speaker explanation of the condition will help the viewers in understanding the treatments that will be discussed later in the video.</p> <p>“these differences lead to different outcomes and different treatments which I'll get to later.” (00:55)</p>	<p><i>A drawing of the human body showing illustrative arrows and text on the Gastrointestinal tract to explain the events that are happening and leading to the condition.</i></p> <p><i>Text: labels for the different parts of the digestive tract are written beside these parts.</i></p>
<p><b>Symptoms</b></p> <p>The major symptoms of Crohn's do however overlap these include stomach pain and a change in bowel habits (01:00)...other symptoms include weight loss decreased appetite fever night sweats and extreme tiredness (01:09)</p>	<p>A hand reaches out to the scene to put different cards that have drawings representing each of the symptoms the speaker is listing.</p>
<p><b>Investigations</b></p> <p>The speaker here explains the kind of tests that health care personals would perform to diagnose this condition</p> <p>“To investigate the cause of your symptoms or gauge the extent of your disease, your care team will listen to</p>	<p>An illustrative scene that shows a patient sitting with a healthcare professional.</p>

<p>your story, ask if there is any family history and then investigate with things like blood tests stool samples...”(01:59)</p>	<p>The healthcare professional is taking notes while listening to the patient.</p> <p>Photo Frames of certificates are drawn on the wall to show the expertise of the health professional drawn.</p> <p>Symbols representing the different ways of investigation is being drawn as the speaker mentions them.</p> <p><i>Text:</i> speech bubble beside the patient as he mentions his history “And then back in 1926...”</p>
<p><b><i>Prevalence and commonality</i></b></p> <p>“IBD is usually diagnosed in young people, say 15 to 25, but it can appear at any time” (02:18)</p> <p>“There is a slightly increased risk for those who have a family member with the condition. IBD is more common in white people and more prevalent among Jewish people of European origin” (02:23)</p> <p>“IBD affects about one in 350 people in most nations but it's more common in northern regions” (02:36)</p> <p>“here in Canada we actually have the highest rate in the world with IBD occurring...(02:38) which translates to about 230,000 Canadians” (02:48)</p>	<p>Illustration of a globe with different labels and numbers that express the prevalence of the condition in different parts of the world and how common it is in different nations and races.</p>
<p><b><i>Causes of the condition</i></b></p> <p>The speaker explains why this condition could happen.</p> <p>“we're not exactly sure why Crohn's happens. It appears that some sort of environmental factor in susceptible individuals... “(02:53)</p> <p>“the immune system then starts attacking healthy tissue inside the digestive system leading to the inflammation” (03:04)</p>	<p>Illustration of the gastrointestinal tract in the human body with little soldiers wandering in the GIT to fight and attack different targets causing inflammation.</p>

<p><b><i>Treatment and cure</i></b></p> <p>The speaker is honest towards his viewers by mentioning the fact that there is no specific treatment. However he then mentions how to manage the condition.</p> <p>“currently there is no cure for IBD, but many of the treatments that are effective target the immune system; so medications such as corticosteroids...or immunosuppressants are often used” (03:11)</p>	<p>Drawing of medication containers beside the mouth a human body and an arrow pointing towards the mouth to indicate an oral route of administration.</p> <p><i>Text:</i> Names of the medications are written beside this illustration.</p>
<p><b><i>Complications of the condition</i></b></p> <p>The speaker mentions some complications that could happen in this condition.</p> <p>“in some cases, deep ulcers break through the wall of the intestine causing infection (04:09)...we call an abscess, and this can actually spread to the skin” (04:17)</p> <p><b>Treatment Cont. (for the complications)</b></p> <p>The speaker still gives a ray of hope by mentioning the treatment in case of having a complication.</p> <p>“about 3 out of 4 patients with Crohn's will require surgery at one point...(04:23) surgery is sometimes necessary...but with early treatment it can often be avoided” (04:36)</p>	<p>Illustration of the colon and inflamed parts are drawn in red</p> <p>Drawing of doctors in scrubs in an operation room performing an operation</p> <p>The patient is lying on the bed during the operation. After the operation, his face drawing is erased, and another happy face with thumbs up is drawn.</p>
<p><b><i>The severity of the condition</i></b></p> <p>The speaker mentions the severity of the condition and how it affects one’s life by describing what the patients suffer from physically, emotionally and socially.</p> <p>“Inflammatory bowel disease can have a profound effect on an individual's life physically, emotionally and socially both at home and at school or in the workplace.” (05:12)</p> <p>“having to go to the washroom more than ten times a day or even talking about ...”(05:25)</p>	<p>An illustration that shows a stressed and upset IBD patient standing in front of his workplace and school.</p> <p><i>Text:</i> three categories of distress affecting the patient are listed: physical, social and emotional.</p>

<p>“It's a disease that often impacts families not just individuals, and it is a journey that requires no small amount of bravery, problem-solving and optimism” (05:31)</p> <p><b><i>Testimonial</i></b></p> <p>The speaker ends this section by providing a testimonial of one of his patients. It provides a ray of hope and optimism for treatment.</p> <p>“as one of my patients with IBD said to me with my ups and downs it was important for me to remember that things will return to normal. it may be a new normal but normal just the same” (05:46)</p>	<p>The illustration of Dr. Mike’s face having a conversation with a patient. Illustration of a person from his back with a speech bubble beside him.</p> <p>Text: testimonial is written in the speech bubble.</p>
<p><b><i>Ending</i></b></p> <ul style="list-style-type: none"> <li>- <i>The speaker ends the video by referring to the vast information that could be found online on this condition.</i></li> </ul> <p>“there are some fantastic IBD resources out there to educate, learn and share with others” (05:57)</p> <ul style="list-style-type: none"> <li>- Then he ends his video by asking his viewers to take care.</li> </ul> <p>“Thanks for listening and take care” (06:05)</p>	<p>Visuals and text:</p> <ul style="list-style-type: none"> <li>- A page dedicated to thanking the gastrointestinal society and Crohn’s foundation of Canada. Logos and Contact information is also included.</li> <li>- Credits are written in a handwriting form.</li> <li>- Blank white page with the credentials of Dr. Mike Evans written.</li> <li>- A disclaimer to show the purpose of the video at the end</li> </ul>

**Appendix G Script/Syntactic structures Case A - Video 3**

<p><b>Introduction:</b></p> <p>“hi, I'm dr. Mike Evans and today I'm reviewing the vaccine for the human papillomavirus” (00:01)</p> <p><b>introducing the topic</b></p> <p><b>The speaker starts by introducing the topic in the form of a story with different role players.</b>          “it is a story that involves: sex parts of your body we don't often talk about, human relationships, warts, our immune system, and unfortunately cancer” (00:10)</p> <p><b>He mentions that his explanation will help the viewers understand the topic and make the right decision.</b>          “the better you understand something, the better your decision and I say decision because the question I want to look at today is should you or someone you care about get the HPV vaccine.” (00:25)</p> <p>“so, let's start with some background, our story begins with the common wart now...” (00:36)</p>	<p><b>Visuals:</b></p> <p>The video starts with an illustration that represents Dr. Mike Evans face and a speech bubble drawn beside his face.</p> <p>Text: A handwriting of the topic title in red inside the speech bubble.</p> <p>Drawn symbols representing the key players of the story</p>
<p><b>Complications of the Condition:</b></p> <p>He explains Cancer as a complication of HPV</p> <p>“we have figured out that certain cancers such as cervical vaginal vulvar anal penile and even some throat cancers can be caused by HPV” (01:16)</p> <p>Then he provides proof by mentioning numbers and statistics</p> <p>“for example, 99% of cervical cancer is caused by HPV as well as approximately 90% of anal cancers and 35% of penile cancers what is not...” (01:25)</p>	<p>A list of different kinds of cancers written in a list with statistics of their prevalence beside each cancer type in red.</p>
<p><b>Treatment and cure</b></p>	

<p>He states the two vaccines for HPV and how they help in the prevention of HPV complications.</p> <p>“researchers have said: maybe we can create a vaccine for HPV and save people from these cancers before they happen” (02:03)</p> <p>“Today there are two vaccines available for HPV; one is called Gardasil, and the other is Cervarix” (02:11)</p>	<p>An illustration of a professional who is looking into a microscope. This set of drawing help in communicating the expertise and the professionalism of the fact mentioned</p> <p>A drawing of two syringes representing the two HPV vaccines available.</p> <p>Different drawings of unpleasant little characters beside each syringe to represent the strain of HPV that could be prevented by each vaccine.</p>
<p><b>Vaccine Administration</b></p> <p>“Both vaccines require three separate shots that are administered over a period of six months” (02:45)</p>	
<p><b>Prevalence and commonality of the condition</b></p> <p>The speaker mentions how common is that condition and its prevalence by numbers</p> <p>“about one in a hundred and fifty women developed cervical cancer, and about 423 women die from it every year worldwide.” (03:00)</p>	<p>An illustration of a globe with labels of different geographical locations and numbers that represent the prevalence of the condition.</p> <p>Drawings of many tombstones are spread in diiferent location around the globe figure to express the death rate by the condition.</p>
<p><b>Vaccine Administration Cont.</b></p> <p>“the best time to receive the HPV vaccine as before a person becomes sexually active to prevent HPV infection before it happens...” (03:12)</p>	<p>An illustration of a female silhouette in front of an alarm to express the time factor of the vaccine administration</p>
<p><i>To help the viewer, take a decision on whether to take the vaccine or not, the speaker mentions the pros and cons of taking the vaccine.</i></p> <p><b>CONS:</b></p> <p><b>The speaker starts by mentioning the draw sides of the vaccine, however his draw sides facts are always followed by an argument that tends to be in favour of taking the vaccine.</b></p>	<p>Illustration of a box that represents the vaccine reporting and different drawings are getting out of the box to represent the results.</p>

<p>“reporting systems which collect adverse events and then analyze any worrisome patterns have signalled possible neurological diseases, blood clots and even death.” (05:11)</p> <p>“showed no obvious clustering to suggest causality meaning they most likely happen by chance or for some other reason.” (05:20)</p> <p>“Australian review signalled a higher rate of anaphylaxis than we have typically” (05:34)</p> <p>“in the case of the HPV vaccine this method shows that about 74% has some kind of reaction to the vaccine, but interestingly so does 64 percent of people who got the placebo” (05:55)</p>	
<p><b>PROS</b></p> <p><b>The speaker lists the different positive outcomes of taking the vaccine.</b></p> <p>“I get that but when you see people suffering from cancer like I do and many of you have and having the opportunity to actually prevent it in the first place” (06:44)</p> <p>“ We know that the vaccine significantly reduces the risk of early markers of cervical cancer as well as vaginal, vulvar, anal cancer” (07:00)</p> <p>“having genital warts can be a very difficult problem so preventing even non-cancerous genital warts certainly has value in my mind” (07:19)</p> <p>“on the other hand we have a shot that hurts a bit, say in four or five people, that may cause some swelling and redness at one of the four people but usually just for a few days” (07:25)</p> <p>“we have a research system that is monitoring the use of the vaccine to see if there are other red flags” (07:42)</p>	<p>A drawing of a DR. Mike sitting on a table and three thinking bubbles.</p> <p>The illustration of Dr.. Mike points to the two sides of the table, one side presenting points pros and the other present the cons.</p> <p>Text: pros and cons are listed on the two sides of the scene</p>

<p><b>At the end of this section, he contrasts by using numbers and facts between the positive and the negative outcomes of taking the vaccine.</b></p> <p>“we need to consider overtime numbers help some people make decisions” (07:45)</p> <p>“significantly reducing your one and 150 chances of getting cervical cancer versus a one and about 40,000 chance of anaphylaxis” (07:45)</p>	
<p><b><i>Ending</i></b></p> <p><i>The speaker ends the video by encouraging the viewers to make a decision on HPV vaccine.</i></p> <p>“I hope this information can help you make the best decision about the HPV vaccine” (08:05)</p> <p><i>He provides an argument at the end to support taking the vaccine</i></p> <p>“it's tough to take a medication when you are healthy, but that is when we have the biggest opportunity to prevent illness before it happens” (08:11)</p> <p><i>However, he still gives the freedom of choice to the viewers</i></p> <p>“Ultimately it's your choice and your call” (08:19)</p> <p>Then he hopes this information has helped his viewers</p> <p>“Hope this helps ” (08:31)</p>	<p>Visuals and text:</p> <ul style="list-style-type: none"> <li>- A page dedicated to thanking “the champion to control cancer” and the email address is mentioned (<a href="http://www.controlcancer.ca">www.controlcancer.ca</a>)</li> <li>- Credits are written in a hand writing form.</li> <li>- A page that mentions names of some physicians to thank them for their thoughtful advice appears at the end.</li> <li>- A disclaimer to show the purpose of the video at the end</li> </ul>

## Appendix H Script/Syntactic structures Case B - Video 1

<p><b><i>Introduction</i></b></p> <p>“Hey guys, so it's Britt from Montreal healthy girl” (00:02)</p> <p><b>Introducing the topic</b></p> <p><b>The speaker starts by describing the topic by very appealing words to grab the viewer's' attention</b></p> <p>“today I'm doing a super exciting video. It's a very heavily requested video, and it might be a little bit of a controversial video. it's going to be about how to cure and completely reverse viral diseases and infections naturally.” (00:05)</p> <p><b>Then she mentions the conditions that she will discuss in the video and describe them with some very non-appealing words like scary and permanent</b></p> <p>“so, we're talking about like you know these really scary conditions that everybody thinks are permanent such as herpes HIV, Epstein-Barr virus and chronic fatigue and so many other viral problems and infections, you know, Ebola virus and these things that everybody is so terrified of.” (00:28)</p>	<p><b><i>Visuals and text</i></b></p> <p>The video does not include any Text or distinctive visuals</p> <p>The whole video features the speaker talking in front of the camera.</p> <p>The background setting is outdoors probably in the backyard of a building</p> <p>One static scene Setting doesn't throughout the whole video.</p>
<p><b><i>Defining viruses</i></b></p> <p><b>The speaker explains viruses.</b></p> <p>“viruses are complete opportunistic microorganisms which means they will only come out to play when your good bacteria is low...00:48, “so basically viruses only really take over our body when the immune system isn't functioning properly” (01:10)</p> <p>“we come in contact with them thousands of times a day, hundreds of thousands of times a day, they are on every surface of everything, they're on every person we encounter...” (02:01)</p>	
<p><b><i>Treatment and cure</i></b></p> <p><b><i>At this section of the video, the speaker starts listing different solutions proposed by her for treating viruses. She sometimes adds some supporting arguments and precautions and safety arguments</i></b></p>	

*either before or after listing each solution. She mentions her propositions in the video in the following order:*

1- “so you know the main thing you want to do is look at really healthy natural and very effective antimicrobial, antiviral, you know, tools that you can use”

2- **The speaker suggests avoiding Vaccinations, and she provides different sub-ideas to support that argument**

“We want to fix the immune system which means if you're dealing with any kind of viral issues you want to stay far away from vaccinations” (02:35)

**Supporting arguments:**

“I know that this is definitely, you know, going to be controversial and of course I want you to do what is absolutely best for you, what makes sense for you, and what resonates with you” (02:41)

“I just know that the amount of heavy metals and additives in Vaccines...is serious” (02:52)

“so, if you're dealing with already viral problems I would heavily recommend staying away from vaccines” (03:05)

3- “incorporating a lot of beneficial bacteria into your life by walking barefoot outside, holding and playing with dirt...that will help introduce beneficial bacteria into your body” (03:15-03:35)

4- “you want to be consuming a high nutritional diet this means a lot of vegetables fresh juices an alkaline diet” (04:29)

5- **Colloidal silver** : “finally I wanted to talk about the best anti-microbial that actually completely paralyze and block viruses ability to reproduce... because I've been using it and making it for a really long time...and that's colloidal silver” (05:22-05:33)

**Supporting arguments**

“in labs, in tests and studies, they have found that this literally stops the reproduction and kills and destroys the HIV” (06:20)

“that's powerful, powerful stuff I am not making it out there's a ton of research online about it you guys are welcome to check it out, you're also welcome to go in a laboratory and do your own testing” (06:32-06:39)

**Precautions and safety arguments**

“make sure you're making it properly...basically you want to avoid salt in your mixture, and the reason for that is that salt will change the way silver interacts and it'll cause clumping” (08:22)

“if done properly it's 100% safe obviously not if you're very heavily allergic to silver but if you're not this is safe for everybody and can be taken in quite large volume” (08:50)

**Administration**

“about start with about an ounce three to four times a day... you're going to put it underneath your tongue and you're going to leave it there in between meals...” (09:06)

“there's also the option for intravenous silver colloidal silver. this is great for Lyme disease, it's great for serious viral infections” (09:58)

**Supporting argument**

“it's a high dose okay but we're looking to get rid of viruses permanently like get them out of your body” (09:34)

6- “the next thing I'm going to recommend is oil of oregano” (10:16)

**Supporting argument – Personal experience**

“I also sometimes just buy new roots oil of oregano...and I play around with different brands you guys are welcome to shop around and find a good one” (10:45)

**Precautions and safety arguments**

“you want to make sure for internal use that it's diluted in olive oil” (10:53)

“I've safely taken really large amounts of it and I found it to be really helpful with boosting the immune system” (11:55)

**Administration**

“do at least three drops of oil of oregano four or five times a day or you could do a larger dose like three” (11:34)

7- “my final recommendation is going to be something else...” (12:06), “this is **organic pure neem leaf powder**” (12:26)

**Supporting arguments**

“this is an excellent digestive tonic immune booster liver cleanser and it's extremely antiviral as well” (12:15)

**Precautions and safety arguments**

“you want to make sure that you get the neem leaf powder and not neem oil” (12:32)

“neem oil can be toxic; it's from the seeds of the neem tree or bush or plant and so you really want to go for the leaf which is a lot less potent but it's very bitter and there's very low toxicity rate” (12:38)

<p>“if you take too much of it, it can be a little bit dangerous for you” (12:58)</p> <p><b>Supporting argument – Personal experience</b>  “I would probably do all three of these things” (13:11)</p> <p><b>Administration</b>  “for the neem, even if you do it alone you're looking at about half a teaspoon to 1 teaspoon 2 or 3 times a day on an empty stomach in a bit of water” (13:14)</p>	
<p><b><i>Recap of treatment options supported by personal experience or personal bias arguments</i></b></p> <p>“Let me put together a protocol for you what I would do if let's say I caught HIV tomorrow or I got herpes tomorrow or whatever” (13:33)</p> <p>“the first thing I would do is, I would not panic. I would know beyond note, without a shred of a doubt that it is 100% healable reversible that this virus could go dormant or disappear from my body” (13:41)</p> <p>“family members that have done this for herpes for themselves” (13:56)</p> <p>“I have worked with numerous patients that are doing all kinds of viral issues including a several that have HIV, other people that have herpes and things like that and I've seen a really amazing success rate and complete turnaround in their health” (14:04-14:13)</p> <p>“so I know for a fact that this is healable not just for my own experience” (14:15)</p> <p>“if it was me I would probably do at least eight ounces spread out throughout the day of the colloidal silver, I would do at least at least 15 drops spread out through the day of the oil of oregano...” (14:32)</p>	
<p><b>Ending</b></p> <p><b>She ends the video by repeating several times that she hopes that her suggestion would help her viewers and ask them to provide her with their feedback and comments.</b></p> <p>“I really hope that this helps you guys please give me your feedback” (16:38)</p> <p>“I really hope that this helps I'm setting...” (17:40)</p>	

<p>“I’m sending my best all my love and wishing you happy healing as always” (18:18)</p> <p>“please share any comments that you have about this video or tips and tools of things that you think also have helped” (18:22)</p> <p><b>She includes an emotional supporting argument at the end</b></p> <p>“I know that with these particular conditions it's very easy to feel discouraged. it's easy to feel like this is a permanent problem. it's very scary to get stuck with a viral outbreak...” (16:41) you know your sex life is over or your personal life is over or that you're potentially going to you know die” (16:55)</p> <p>“there is nothing wrong with you if you're dealing with any of these things in this moment. don't feel like you're discarded from society or that you know there's something permanently going on for you or that there's no hope or that it's always going to be this way” (17:42)</p> <p><b>Another Supporting Argument</b></p> <p><b>The speaker supports her belief that these conditions could be completely healed by providing another argument as she is either challenging or encouraging the viewers to do their research.</b></p> <p>“I am telling you you can absolutely heal from this like absolutely I really really believe that to be true, I know that to be true through my own personal experiences and those that I've witnessed” (17:55)</p> <p>“You don’t have to take my word for it like I said you can do your research you will find tons of information of people who have reversed their HIV and their infections with viruses naturally using these methods or similar methods” (18:06)</p>	
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### Appendix I Script/Syntactic structures Case B - Video 2

<p><b>Introduction</b></p> <p>“Hey guys so it's Britt from Montreal healthy girl” (00:02)</p> <p><b>Introducing the Topic and the related conditions :</b></p> <p>“I’m just going to do a brief video today about you know I'm just going to kind of expand a little on a video that I did a while ago about SIBO “small intestinal bacterial overgrowth” and other kind of bloating digestive problems” (00:04)</p>	<p><b>Visuals and text</b></p> <p>The video does not include any Text or distinctive visuals</p>
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<p>“also is going to encompass people that have stomach ulcers or h pylori or dealing with other... electronic acid reflux and GERD and all of this” (00:28)</p>	<p>The whole video features the speaker talking in front of the camera.</p>
<p><b><i>Explaining why SIBO happens</i></b></p> <p>“why you can't get rid of your SIBO” (00:35)</p> <p>“you have SIBO small intestinal bacterial overgrowth or overgrowth in the stomach this is only ever happening for two reasons...” (00:46)</p> <p>“happening because you have too many microbes in the colon and too many parasites and that is irritating your ileocecal valve” (00:56)</p> <p><b>Defining ileocecal valve</b></p> <p>“your ileocecal valve is the valve that shuts off your small - your large intestine, and as food passes through, usually the flap opens and then...” (01:02)</p> <p><b><i>The speaker links the previously mentioned two ideas (SIBO reasons and Ileocecal valve definition)</i></b></p> <p>“so that's part of the reason why we have this chronic inflammation” (01:22)</p> <p><b><i>The speaker mentions stomach acidity as a reason for SIBO and then explains its causes, effects and treatment in detail</i></b></p> <p><b>Reasons for low stomach acidity:</b></p> <p>“there's a lot of reasons for this <b>antibiotic</b>. they destroy your good bacteria which creates a natural acidity automatically” (01:52)</p> <p>“not chewing enough, eating processed food damages the stomach lining, makes it hard to make enough stomach acid” (02:01)</p> <p>“it could be because you're on medications, a lot of things like over-the-counter you know pain reliever and things like that also can cause a lot of problems in the stomach and suppress stomach acid production” (02:29)</p> <p>“it could be that you're overcooking any denatured foods whatever it is honestly it could be so many different things” (02:39)</p> <p><b><i>The speaker then alternates between the effects of low stomach acidity and her explanation of stomach bacteria</i></b></p>	<p>The background setting is indoors. Maybe at her place</p>

**Effects of low stomach acidity**

“you're not producing enough stomach acid to completely turn all of your food to chime to liquid” (02:54)

“so, what happens is your food gets halfway broken down, and your body starts to panic. You can't just start you know unloading a bunch of half broken-down food into your Intestines, like this is super inflammatory” (03:05)

“in general, if you have enough stomach acid you basically sanitize and kill the bacteria in the food in your stomach, so you can break the food down fully” (03:39)

**Nature of stomach Bacteria**

“those bacteria and things don't have a chance to inhabit your body when you don't break your food down fully” (03:46)

“Those bacteria they over grow they start to over grow in the stomach” (03:51)

“they're breaking down the food breaking down the food that's their job that's their role they're trying to survive and now there's so many of them they'll start to multiply” (04:13)

**Effects of low stomach acidity cont.**

“because of lack of stomach acid so you end up with a ton of bacteria in the small intestine and they're actually they're trying to help you because you would Auto poison yourself if a bunch of undigested food passing of the colon” (04:27)

**Nature of stomach Bacteria cont.**

“they're doing this to sort of help themselves and help you” (04:39)

**Effects of low stomach acidity cont.**

“you're fermenting it in your small intestine this is why you get the liver pain this is why you get the gas this is why we get gallstones this is why we get a lot of the problems we do with SIBO it's why no matter what you eat no matter how you change your diet you still can't digest anything, you're still either have diarrhea or constipation or bloating” (04:45- 05:01)

**Treatment of low stomach acidity**

“the main cure other than a healthy alkaline diet that heals your whole body strengthens your immune system you know rebuilds gut lining all of that the main way to get rid of SIBO is to fix your stomach acid” (05:42)

“Briefly here things like having lots of fresh Ginger, making your own pickled ginger. Naturally, fermented ginger, fermented foods are going to help a lot with stomach acid.” (06:05)

“you can always also do a supplemental short-term stomach acid supplement like HCl” (06:43)

**Stomach acidity test**

“I also talked in my stomach acid video about a test you can do, the baking soda test so I'll mention it briefly” (07:04)

***Argument to introduce and support mentioning the test in the video***

“there's nothing more annoying than watching a video till the end and they don't give you the solution I know it happens all the time” (07:13)

“basically, the stomach acid test is putting a teaspoon of baking soda non-aluminum...yourself even if you have enough stomach” (07:18-08:20)

**Treatment of low stomach acidity Cont.**

***The speaker goes back to suggest different ways of treating the low stomach acidity***

“having ginger having you know, apple cider vinegar, taking probiotics, fermented food you're...” (08:22)

***Ending***

**The speaker ends the video by encouraging the viewers to try out her suggestions and supports them by mentioning that it might take some time to start healing.**

“try this out, you're not going to see a solution in one week, it might take a month to three months for you to really notice the difference in your healing” (08:52)

“see how you feel with all the suggestions that I made and trying a few of these things together you should notice a huge difference really quickly” (09:07)

“hope this helps sending my best, bye guys” (09:14)

## Appendix J Script/Syntactic structures Case B - Video 2

<p><b>Introduction</b>  “Hey guys so it's Britt from Montreal healthy girl” (00:02)</p> <p><b>Expression of Closeness</b>  “I think I had like insomnia or something, I had trouble sleeping I had like a very exciting conversation right before bed...” (00:08)</p> <p><b>Introducing the Topic and the related conditions</b></p> <p><i>The speaker starts by mentioning why she made that video. She introduces her video in a way that could be appealing for the viewers and grab their attention. She mentions her close contact with cases who suffer from this condition on a personal level and She gives impression that it's a requested topic by her viewers.</i></p> <p>“I was doing going through some of my videos and there was some comments that people posted and somebody actually asked me to do a video about psoriasis” (00:16)</p> <p>“and I've been meaning to do this for a while because I recently you know rekindled with a friend who is actually battling with psoriasis now” (00:26)</p> <p>“I also dated somebody, like when I was young, I think it's my first serious boyfriend and he had really bad psoriasis” (00:35)</p> <p><b>Personal experience argument to introduce the topic</b>  “I had loads of acne and scars and cysts and rashes of all kinds and like so I mean I feel you” (01:15)</p>	<p><b>Visuals and text</b></p> <p>The video does not include any Text or distinctive visuals</p> <p>The whole video features the speaker talking in front of the camera.</p> <p>The background setting is indoors. Maybe at the speaker's place</p>
<p><b>Explaining the causes of This Condition</b></p> <p>“if you're dealing with any skin condition especially things like psoriasis eczema acne it always starts in the gut. okay your gut and your skin are basically mirror images of themselves” (01:32)</p> <p>“so there's a few gut factors it could be contributing to why you have psoriasis in the first place” (01:48)</p> <p><b>The speaker alternates between the causes and her proposed solutions to motivate the viewers to avoid causes.</b></p> <p>“Poor protein metabolism...is one of the main factors in why we develop skin conditions in the first place like psoriasis” (02:26)</p> <p><b>Proposed cure</b></p>	

“dealing with psoriasis, I would definitely cut down on the amount of meat fish animal products dairy in your diet” 02:59

“marinate any meats that you do have in a lot of lemon juice and take apple cider vinegar before all of your meals unless you're having a fruit meal it's not essential to do it then but you want to if you're having any you know meats or even veggies or beans” 03:15

### ***Causes***

“It could also be sugar metabolism issues. If you have a lot of yeast and the yeast is fermenting all the sugars or carbohydrates that you eat this is going to result in a lot of fermentation... they can lead to chronic skin conditions” (03:53 - 04:16)

### ***Proposed cure***

“the first thing you want to eat if you're dealing with psoriasis is a lot of foods rich in vitamin A. you want to go hard on any orange food, so we're looking carrots and squashes and sweet potatoes” (04:26)

### ***Causes***

“in fact, I believe every single person that has psoriasis or any skin condition at all, has a stagnating or backed-up liver” (05:02)

### ***Proposed cure***

“So what can you do to cleanse your liver, the very best best tools for cleaning out your liver and whether you have psoriasis or not (05:08)...having fresh lemon water first in the morning (05:29)...beets are also an excellent tool for cleansing out the liver” (05:43)

### **Confusion - bad preparation/ organization**

“let me see what else what else okay so bone broth is an excellent tool for replenishing minerals and helping to heal and seal the gut” (06:24)

**The speaker in a non-structured way proposes two more solutions related to handling body minerals which are Bone broth and probiotic supplements. She refers back to her videos as a supporting material that the viewers that can consult**

“if you don't know what bone broth is or you don't know how to make it and you can check on the other video; I have another video all about bone broth on how to make it” (06:32)

“if you want to know more about **probiotic supplements** I do have a video I think it's called all about probiotics” (07:31)

“I do have videos about that and I am due to make a more recent new parasite video as well” (09:17)

### **Supporting Argument**

“I mean I just had someone write me under one of my videos saying that they had you know tooth infection and all that stuff and where they had

their kind of abscess or infection now they see like a worm there you know and this is very common and they're on a parasite cleanse right now" 08:58

***Causes***

"vitamin D deficiency, if you're living in the north you have psoriasis a big part of the reason why you have psoriasis" (09:43)

***Proposed cure***

"always take a vitamin D supplement just to be safe 10:04 I really love Garden of Life brand" (10:12)

**Supporting Arguments**

"I am not remotely affiliated to any supplement brand I do not endorse a single product so every suggestion that I put on my entire Channel and it will forever remain this way (10:15) ... this is the product that I would buy and that I would give my own children, my parents, my whoever else you know, my people, myself" (10:28)

"as well I've done my research and they have the lowest toxicity rate and the highest nutritional component" (10:36)

"of course you can you know do your research on vitamin d3 supplements" (10:42)

***Instructions on Proposed cure***

1- "make sure it's d3 and not d2 from natural sources and not synthetically derived as much as possible and I think you want to aim for about 2,000 IU's a day a vitamin D most capsules generally come in that dosage you might want to go a little bit more you can maybe do two capsules or something for a couple of weeks and see how you feel but better than that" (10:54 - 11:07)

**Supporting Argument based on the speaker's personal experience**

"what I would do is, I've actually found a tanning salon in Montreal and there are many of them where I go and they have machines that actually have healthier lighting and I go for very short periods of time so you know five to ten minutes in a machine that is three quarters or at remember and I always feel really great" (11:35- 12:46)

"I absolutely suggest that if you are going to go and get Sunbed treatments that you do not use a single tanning cream, do not use any oil on your skin, make sure that you didn't use any synthetic moisturizers or any of that ideally you don't want to use any of those things in general because they're toxic and bad for your body. you want to leave your skin bare and natural the only things you should ever put on your skin or

<p>natural oils like coconut oil olive oil sesame oil argan oil things like that” (12:55)-(13:18)</p>	
<p><b>Ending</b>  “so I hope that these tips and tools helped you guys” (13:25)</p> <p><b>Recap on proposed cures</b>  “you want to decrease acid food, increase alkaline foods, lots of leafy, green vegetables, lots of healthy foods, you know. you want to look at also foods that are rich in omega-3... like vitamin D and vitamin A and all of that stuff” (13:31)-(13:48)</p> <p><b>The speaker attempts to end her video by hoping her solutions would help the viewers and then she asks them for feedback.</b>  “so I hope this helps have a great day and anybody dealing with psoriasis if anything is work for you please reach Out” (13:50)</p> <p><b>Proposed cure</b></p> <p><b>Confusion - bad preparation / organisation</b>  “Oh before I end the video, I did want to talk about things you can use topically as well” (13:57)</p> <p>“one of my favorite topical treatments is extra virgin coconut oil; coconut oil kills yeasts and mites and you know parasites and fungus and all kinds of things that you might have on your skin” (14:06)</p> <p>“you can always mix a couple of drops of lavender or tea tree oil...” (14:21)</p> <p><b>Instructions on Proposed cure</b>  “make sure it's very diluted that one's quite strong... and then rub this all over your psoriasis and you can do this once or twice a day” (14:31)</p> <p><b>Ending Cont.</b></p> <p><b>The speaker repeats the same ending that she mentioned in the video earlier</b>  “use these tools, let me know what works for you let me know if anything else has as well, please share if you are dealing with psoriasis and something that's worked for you it's always great to get new information and everybody out there” (15:13)</p> <p>“I'm sending my best, have a lovely day and I will talk to you, soon bye” (15:23)</p>	

**Appendix K Script/Syntactic structures Case C - Video 1**

<p><b>Introduction</b></p> <p>Sound: No sound</p> <p>The speaker used titles and photos at the beginning of the video to introduce the topic and the case that she will be operating on.</p>	<p>Visuals: The video starts with showing a zoomed photo of a scrotum that has lesions all over it.</p> <p>Text :</p> <p>Video title Part1: REMOVING SCROTAL CALCINOSIS CUTIS</p> <p>Labelled photo with an arrow pointing to a scar. Text: Hypopigmented scar where a lesion was removed</p> <p>Then microscopic pictures that show the histological features of the lesion is presented Text: Microscopic appearance of his tissue ( calcinosis cutis )</p> <p>Text: You can see the calcium deposits...which are the darker pink/purple areas (That vary in size and shape )</p> <p>A legal disclaimer is presented to explain the purpose of the video</p> <p>A watermark that represents Dr. Pimple Popper’s logo is present on the photos and stays on the very top right corner of the video till the end.</p>
<p><b><i>The procedure</i></b></p> <p><i>The speaker started the procedure by explaining the lesion to the patient</i></p> <p>“These are called calcinosis cutis, okay? This means that calcium deposits really right in there” (00:56)</p> <p>The speaker informs the patient with what she is doing in the procedure and involve him in most of the steps gives him instructions at the beginning</p> <p>“This is numb, okay? You make sure to tell me if anything ever hurts” (01:02)</p>	<p>Visuals feature the procedure steps. The speaker hands wearing gloves are seen in the scene carrying out the procedure</p> <p>Grotesque imaging The speaker cuts into the lesion and drain the calcium deposits. (speaker press on lesions and a white viscous liquid gets out)</p> <p>Considering confidentiality and privacy issues</p>

“I'm gonna just squeeze that one and see if we can squeeze a lot of that out” (01:12).

“I don't know if you saw it before, did you watch it when Dr. Rebish was doing it? Did you see it's like, a very like, toothpaste-ish material?” (01:21)

“I'm gonna squeeze it actually with my tweezers and see if it will make it come out” (01:35)

**Humble expert-she changes her technique to accommodate to the situation**

“I don't know about whether this is the best way to do it because we might not get rid of the whole thing” (01:49)

**Maintain a personal/casual conversation with the patient**

“He said he had these since eighth grade that's gotta be very tough meeting girls and things like that, right?” (02:37)  
you married, or...? (02:40)

**The speaker takes the patient consent**

Prepares the patient for what she will do and keeps him well informed and involved in the operation  
“Okay, I'm putting a little numbing on the other ones, okay, you ready? (03:25)

“But, I think we need to get rid of that raise there, yeah?” (05:09)

“So, that's what I'm gonna do here, okay? You're okay with that right?” (05:19)

**Acquiring lesion history**

The speaker tries to know more about the history of the lesion from the patient. That could also give the impression that the lesion is so big and that the procedure is a hard one that requires an expert to perform it.

“When you were in eighth grade or so, and they just slowly increased in number And then how did you?- Did you ever go to a doctor and have them looked at, or....” (05:38)

Text : His voice has been muted, And I have included word he has said in blue text

Text : DR REBISH DID THE INITIAL BIOPSY AND GOT THE MICROSCOPIC DIAGNOSIS FROM THAT TISSUE (01:20)

Text : TRYING TO DEVISE THE BEST PLAN FOR REMOVAL... (01:58)

I THOUGHT JUST SQUEEZING THE CONTENTS OUT COULD BE GOOD ENOUGH, BUT..(02:11)

I REALIZED THAT THE “BUMP” WOULD STILL BE THERE AND THAT NEEDS TO BE REMOVED AREA TO LOOK BETTER (02:16)

HOWEVER, THIS MAY MEAN HE HAS LIGHTER THAN SKIN COLOR PERMANENT SPOTS... (02:26)

BUT THESE HYPOPIGMENTED SPOTS WILL BE FLAT AND LESS NOTICEABLE THAN THE BUMPS (02:35)

Text ( in blue) - patient : I'm fine  
Text (in blue ) - patient :Ready (03:29)

Text (in blue )- patient: “I went to see a regular doctor, and they just gave me creams that didn't work “ (05:48)

Text (in blue )- patient: “No, I went by myself, my sophomore and junior year in school...” (05:54)

“But that was when you were older? Like did you go by yourself or did you talk When did you finally figure out that, that was what these were?” (05:57)

**Mentioning procedure Progress**

“Alright, three down and how many more to go?” (06:40)

**Procedure goals**

“My goal is at least Once we get on a roll, we're going to be faster..”(06:47)

**Acquiring feedback and ensuring patient satisfaction with the results**

“You don't think I need to talk anything more on them, right? You're okay with that?” (07:01).

**Procedure goals**

“Let's get this nice and clean. See how it's sticking to you” (07:11)

**The speaker Shows that this procedure is so important for the patient and that the speaker is performing a hard operation**

“God, you were probably dreaming of this day” (07:29)

**The speaker Refers to another patient with the same case**

“I had one gentleman who had one of these, He had, like, this kind of thing, but bigger ones You know, who knows, we didn't see the scrotal area, maybe he even had them there and he never showed us? Cause he came with his mom, remember?” (07:41).

**The speaker is giving the patient and the viewers an impression that she is doing a good job**

“See how I'm trying to do all, even the little ones?” (08:45)

**Humble expert – the speaker involve the patient in the procedure and give him instructions to help her carry out the procedure properly**

“So, sometimes if I miss a little gap and you feel a little pinch or something, you just let me know” (08:49)

Text (in blue )- patient: “um... I did some research on it” (06:04)

Text (in blue )- patient: “not too bad...” (07:29)

<p><b>Humble expert- Self-criticism.</b> The speaker compares between her old and new videos. “Sorry I talk a lot, but that's part to distract you, and- I have noticed in my videos, I talk more now, what the heck? It's turned me into this monster Like, when I watch my old videos, I'm like, "Wow, look how nice and silent it is" Why am I talking so much now?" (09:55)</p>	<p>Text (in blue )- patient: “Uhhh... not really...” (11:34)</p> <p>Text: PLEASE SEE PART 2 FOR THE SECOND HALF OF THIS TREATMENT SESSION (11:50)</p>
<p><b>Ending</b></p> <p>She is giving the impression that she is doing her best to get the best results “I want to just make sure it looks as good as it can be” (12:01)</p>	<p>Visuals</p> <p>Text: THANK YOU FOR WATCHING @DR SANDRA LEE (12:00) A screen showing different social media accounts of Dr. Sandra Lee.</p> <p>Text: subscribe for more</p>

**Appendix L Script/Syntactic structures Case C - Video 2**

<p><b>Introduction</b></p> <p>Sound: No sound</p> <p>The speaker used titles and photos in the beginning of the video to introduce the topic and the case that she will be operating on.</p>	<p>Visuals : The video starts with a video of dr sandra and her assistant at the operations room in the operations medical attire carrying out a part of the operation. And the title of the video is displayed.</p> <p>Text : Video title NO GENERAL ANESTHESIA TRUE TUMESCENT LIPOSUCTION ©DR SANDRA LEE (00:00)</p> <p>Then photos showing a “before and after” appearance of the patient thigh. Text : THIS PATIENT PREVIOUSLY HAD HER OUTER AND INNER THIGHS TREATED WITH LIPO (00:08)</p>
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<p><b>Introducing the procedure</b></p> <p>“This is my patient today. We are going to do her lower abdomen and her and her hips here” (00:31)</p> <p>“we've done this before in a different area” (00:50)</p> <p><b>Patient Doctor dialogue</b></p> <p>Dr Sandra : hi</p> <p>Patient : hi</p>	<p>A legal disclaimer is presented to explain the purpose of the video</p> <p>A water mark that represents Dr Pimple Popper’s logo is present on the photos and stays on the very bottom right corner of the video till the end.</p>
<p><b>The procedure</b></p> <p><b>Explaining the procedure</b></p> <p><i>The speaker explains whats he is doing in the procedure to keep the viewers and the patient informed.</i></p> <p>“So I'm putting some numbing locally in the skin here” (00:57)</p> <p>“We're going to put a little numbing on the skin because I'm actually going to do what's called tumescent Infiltration with a torch or two” (01:08)</p> <p>“IV bag has numbing in it and...epinephrine that stops a little the blood vessels from Constrict (01:19)</p> <p>“it turns a little whiter, Okay, because of the fact that we click the filtration there” (01:39)</p> <p>“These are the cannulas that we used to infiltrate” (02:01)</p> <p><b>Expressing expertise</b></p> <p><i>The speaker is describing the feeling that patient should feel. She bases that on her expertise. she has experience with other patients and that’s what she has heard from them</i></p>	<p>Text : TODAY WE ARE DOING HER ABDOMEN AND HIPS... TUMESCENT LIPOSUCTION! (00:20)</p> <p><i>The speaker points out to a device beside the wall that has the IV bag that she is describing</i></p> <p><i>The camera shows the skin that is white in color</i></p> <p><i>The speaker shows the cannulas to the camera</i></p> <p>Text : THIS IS TRUE TUMESCENT LIPOSUCTION UNDER LOCAL ANESTHESIA, ALONE!</p>

<p>“you don't really feel it, I mean, maybe it feels like pushing, but it doesn't hurt” (02:20)</p> <p>“actually you tell us what it feels like feels just tight little pressure” (02:28)</p> <p>“sometimes people say it burns a little”(02:32)</p> <p>“and it's a little uncomfortable in the beginning here” (02:44)</p> <p><b>The speaker checks on the patient during the procedure</b></p> <p>“are you okay? It's too strong. I could slow down” (02:55)</p> <p>It's not clear weather this explanation is for the assistant, the viewers or the patient.</p> <p>“So we're going to put this in here and infiltrate we're going to make it real full here” (03:00)</p> <p><b><i>The sound is not clear</i></b>  <i>the speaker doesn't continue her sentences as she gets busy by the procedure itself so the true purpose of education is not totally clear here.</i></p> <p>“And then once it's filling up the area of fat, the level of fat..”(03:04)</p> <p>Dr Sandra to her assistant : want to do a third right, okay?</p> <p><b>Casual conversation with the patient</b></p> <p><b>Doctor - Patient dialogue (03:46)</b>  Dr. Sandra : don't buy anything right now you might be over buying  Patient : I always buy stuff like 3:00 a.m.  Dr. Sandra : Oh, I do too, what size do you use  Dr. Sandra : Yes, actually did you see this new thing.. I heard on the news</p> <p><b>Doctor - Assistant dialogue (04:12)</b>  The assistant : Which one dr?  The speaker : Let's do that one and then..</p> <p><b>The conversation is very unorganised and unclear.</b>  <i>It sounds like a random conversation that get interrupted for procedure purposes</i></p>	<p>(02:29)</p> <p>the face of the patient is blurred while the patient is speaking (03:38)</p> <p>Text : AS YOU CAN SEE, THIS MAY LOOK TRAUMATIC, BUT THERE IS MIN TO NO DISCOMFORT (04:57)</p> <p>Text : TO FILL THE ADIPOSE/FAT LAYER WITH ANESTHESIA...THIS HELPS WIDEN THIS LAYER.. (05:10)</p> <p>Text: MAKING IT SIMPLER AND SAFER TO PLACE A LIPOSUCTION CANNULA IN THE AREA AND REMOVE FAT! (05:18)</p> <p>The camera shows the device while the speaker is describing the process</p> <p>Text :I TAKE MY TIME WITH THE ANESTHESIA, THE SLOWER I GO, THE LESS DISCOMFORT...</p>
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“There's this new thing I forgot I think it's called Amazon dash” (04:18)

“but anyways yeah, yeah, this one is really cool. It's like..If you have you put it on the inside of your cabinet in your laundry room and when you run out of tight You just push the button and it orders more for you, so it shows up at your door”

**Explaining the procedure Cont.**

“numbing medicine mix with saline in them And then it goes down to this...this is infiltrator and it rolls out It rolls through and it pushes the fluid up into here” (05:48)

“it's very hard because you put a lot of fluid that's mixed with lidocaine and epinephrine. That's why it's turning lighter...Lighter skin color is helpful because it helps to Prevent from bleeding too much” (06:24)

**The speaker assumes how the patient feels.**

*Which gives an impression of the speaker's expertise.*

“So we're getting there right you doing all right, a little bit pinches sometimes in little areas, but not too bad” 06:42

**Patient confirms**

Patient : No

“How do you feel? You feel like you got a bunch of textbooks on yeah?” (06:48)

**Patient confirms**

Patient : Yeah, feels heavy

**Procedure instructions**

“I'm going to take these out and I'm going to turn you on your side, okay, okay?” (07:00)

“So you can turn to your right side just be careful. Don't reach down here and just turn on your side take your time” (07:04)

**Casual conversation**

“he got mad because you thought that Kk meant like Kim Kardashian” (13:42)

(5:31)

Text : ALMOST FINISHED WITH TIMERSCENCE AREA GETS FIRM AND BLANCHED / WHITER IN COLOR (6:20)

The camera shows the fat coming out in a transparent pipe

Text : READY FOR THE FUN PART.. LIPOSUCTION ©DR SANDRA LEE (10:07)

Text : USING A 2 MM PUNCH TO CREATE "ADITS" IN THE SKIN, WHERE I INSERT LIPO CANNULA (10:29)

Text : I CAN'T DECIDE IF I LIKE IT OR NOT THAT I'M BECOMING THE "PRINCESS OF PUS"... (Winking emoji) (13:00)

Text : THIS... IS WHEN WE GOSSIP!! (Embarrassed emoji) ©DR SANDRA LEE (13:38)

**Procedure outcomes**

“That's how we tell how much we got cause I know it looks really swollen and bigger that has stretched the area temporarily” (15:18)

“Tomorrow it's going to look really nice” (15:28)

**Checking on the patient**

“You're doing great right, no problem, all right?” (15:47)

**Procedure instructions**

“Can you straighten your legs for me? Thank you, and then yeah, they're perfect” (16:29)

**Explaining the procedure**

“so I draw these circles here, and it's like a topographic map.. Meaning that the more circles the higher that area is, the more flat I want that area to be It just helps to guide me” (17:40)

**Expressing her techniques to stand out**

“Sometimes that wears off and that's why I make my [backup]. We took photos too. So I could see later - [in] [case] something rubs off, and I can't see where I was going or just in a general guideline” (17:58)

**Procedure Outcomes**

“Before she had a hip that was more you could grab it like it was grab it like that, So now we can only grab it like this, and that's how I know..even really skinny people have this and they have a little a lot of women have this hip is going where those low ride sees the thing sticks out?. Here, it's not very cute. This is going to be really nice this is really going to sculpt into her waist well and and”

“Make her but not look at our butts doesn't look a squirt looks more rounded an hourglass shape. So that's what we're doing [almost] there, so this is what we can pinch, and that's what we're trying to do” (18:39-19:12)

“So I'm just trying to even it out. Make sure it's nice and contoured” (19:16)

The speaker shows the area and the shape she is describing by using her hand and pointing on the patient's body

<b>Ending</b>	<p>The speaker ends the video by showing a before and after the procedure photos for the case.</p> <p>Text : BEFORE AND AFTER LIPO TO HIPS LOCAL ANESTHESIA ONLY! ©DR SANDRA LEE (19:24)</p> <p>Ending screen with Dr Sandra's social media accounts and her photo</p> <p>Text :Subscribe for more videos</p>
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## Appendix M Script/Syntactic structures Case C- Video 3

<p><b>Introduction</b></p> <p>The speaker used titles and photos in the beginning of the video to introduce the topic and the case that she will be operating on.</p> <p>Sound : “then this one up here. We got a bigger one up here, too” (00:12)</p> <p><b>Introducing the procedure or the lesion</b></p> <p>The speaker speaks quietly then starts speaking more clearly and loudly when she knew that they started filming “Yeah, you start filming actually. This is truly a dilated pore I do believe you [just] like to grow these” (00:32).</p> <p><b>Doctor - Patient’s wife dialogue</b></p> <p>Dr Sandra : your wife doesn't like to squeeze them obviously (00:38) The wife : some people do so (00:47)</p>	<p>Visuals : The video starts with showing a zoomed photo for a pore of Winer in skin</p> <p>Text : Video title NOW THAT'S A HOMOGENOUS DILATED PORE OF WINER ©DR SANDRA LEE</p> <p>A video of the speaker pointing out to the two pores that she will be working on during the video. Text : AND ANOTHER ONE TOO!! @DR SANDRA LEE (00:16)</p> <p>Text: ALSO WILL BIOPSY THIS PROBABLE BASAL CELL CARCINOMA ( TYPE OF SKIN CANCER) (00:19)</p> <p>A legal disclaimer is presented to explain the purpose of the video</p> <p>A water mark that represents Dr Pimple Popper’s logo is present on the photos and stays on the lower right corner of the video till the end.</p>
<p><b>The procedure</b></p> <p><b>Procedure instructions</b></p> <p><i>The speaker gives instructions to both the patient and the wife to help her during the procedure</i></p>	

“can you lean a little more forward just a [little] bit? Yeah?..Yeah, hold your wife, she can hold. make sure you don't fall forward” (00:51)

**Checking on the patient**

“Make sure I'm not hurting you am I hurting you, you okay?” (01:03)

‘are you okay?’ (01:20)

**Describing the lesion**

*The speaker is very surprised by how big the lesion is and that gives the impression that it's a hard procedure to stand out her expertise*

“Oh goodness this little friend of yours? I think you're gonna lose a little weight today. It's like a rock” (01:28)

“Wow Look at that area there , that is a big blackhead you might have the award for the biggest blackheads. Oh my goodness” (01:34)

**Procedure outcomes**

*The speaker explains the outcomes and assure the patient about the results to ensure his satisfaction and understating*

“it will get smaller you know but at least it's open so that it's not going to really fill up you can clean that (02:00) ...But it's just that this blackheads pushed him and pushed a hole like internally (02:07)...Because if you sew that up, it's just going to be an empty space because it's not refreshed (02:12)...I Can't I can't sew that up, okay?” (02:16)

The wife asks questions about how to handle the case and the speaker answers her questions.

The wife : So I'm supposed to keep it clean now

**Casual conversation**

**Pantinet’s wife - Doctor - Patient**

Dr sandra : He's so sweet. Did you say you were ninety? heard you've got grandkids that are in harvard and really smart

Wife: we have a granddaughter. That's getting her doctorate in physical therapy. and one graduating from Harvard

**Checking on the patient**

“Just make sure again. I'm not hurting” (04:11)

(01:37) the scene of extracting the first black head is repeated twice

Text : TO PROPERLY “CLOSE THIS HOLE” I NEED TO EXCISE THE SKIN AROUND AND SEW IT CLOSED (2:14)

Text : WE CAN DO THIS IN THE FUTURE IF HE WISHES, BUT THESE “HOLES” WILL SHRINK SOMEWHAT IN TIME (02:25)

<p><b>Humble expert</b>          “I don't know if I can get this out of one piece” (04:19)</p> <p><b>The Speaker apologizes for hurting the patient and assures him</b>          “Okay, I'm sorry. I'm so sorry. I won't go over there. Okay. You okay now. Yeah” (04:26)</p> <p><b>Speaker comments on the lesion in a funny way</b>          “your clothes are going to fit you better now. This thing is like a hump on your back” (04:51)</p> <p><b>The speaker discuss the history of the lesion and provide the wife with information on the case</b>  <b>Doctor - Patient’s wife dialogue</b>          Dr Sandra : I know you were kind of concerned about that one home being something (05:16)          Wife: Dr.. Styles mentioned it Might be [a] cancer under there. (05:21).          Dr. Sandra: because it kind of grew so fast it was quite big. It was just so unusual to be so big</p> <p><b>Procedure outcomes</b>          “wow, that one came out nice” (05:45)</p> <p>“Look at this angle. There's like a whole lot. Empty space here - but I think we got all that” (05:57)</p> <p>“I'm also going to let this heal on its own because. It will slowly get smaller we've seen this before where they will heal in and get smaller...we can't sew it up” (06:02)</p> <p><b>Positive description of the outcomes</b>          “Feels better, look how much fun is that's going to be that's gonna be a lot nicer” (06:17)</p>	<p>(05:44) the scene of extracting the second black head is repeated twice</p> <p>Text : THIS IS ACTUALLY NOT AN OPEN WOUND ITS SKIN THAT HAS PUSHED INWARD CREATING A “HOLE” (06:15)</p> <p>(06:30) Procedure outcomes is featured visually as the camera zooms on the two extracted blackheads on the table</p> <p>(6:47) a photo displaying the end result</p>
<p><b>After the procedure</b></p>	

<p><b>Demonstrating the significance and the necessity of the procedure outcomes</b></p> <p>“Petrified rocks at our body, I can't even push into that, look was compacted in there seventy year ago” (06:49)</p> <p>“Yeah, I want to show him, Look at what came out of your back. I think [he] lost a little weight today” (07:23)</p>	<p>The speaker with the extracted blackheads and hit them against the table to show how big and hard they were.</p> <p>The speaker takes the two solid masses to show the patient what she has managed to extract from his back</p>
<p><b>Ending</b></p> <p>“that was pretty amazing huh? Yeah, yes, All right, we're good” (07:28)</p>	<p>Ending screen with Dr Sandra’s social media accounts and her photo</p> <p>Text: Subscribe for more videos</p>