Cultura, lenguaje y representación / Culture, Language and Representation

Universitat Jaume I

 Ramirez Polo, Laura (2024): From Evictions to Shame: Exploring Hysterectomy Through Metaphor. *Cultura, Lenguaje y Representación*, Vol. XXXIV, 171-193
ISSN 1697-7750 · E-ISSN 2340-4981
DOI: https://doi.org/10.6035/clr.7889



From Evictions to Shame: Exploring Hysterectomy Through Metaphor

De desahucio a vergüenza: exploración de la histerectomía a través de la metáfora

LAURA RAMIREZ POLO RUTGERS UNIVERSITY¹ https://orcid.org/0000-0002-8022-5079

Artículo recibido el / Article received: 2024-01-26

Artículo aceptado el / Article accepted: 2024-04-10

RESUMEN: El presente estudio analiza expresiones metafóricas relacionadas con la histerectomía en un corpus diverso que incluye textos científicos, foros de Reddit y artículos y blogs escritos por pacientes. El objetivo es comprender cómo se construye discursivamente la histerectomía y cómo la experimentan las mujeres. El corpus revela una gama de metáforas desde descripciones clínicas hasta expresiones personales y creativas. El análisis muestra que las metáforas no solo reflejan, sino que también influyen en la percepción que tienen las mujeres de sus cuerpos y del procedimiento. El estudio identifica metáforas que incluyen el útero como un 'inquilino' o un 'secuestrador' y el procedimiento como un 'desahucio' un 'robo', destacando los aspectos emocionales y psicológicos de la histerectomía. Las limitaciones incluyen el tamaño del corpus, falta de metadatos para establecer más correlaciones, y su perspectiva centrada en Occidente, sugiriendo la necesidad de una investigación más inclusiva. El estudio contribuye al discurso sobre la salud de la mujer, enfatizando el papel del lenguaje en la configuración de las experiencias médicas. Subraya la necesidad de comprender el lenguaje metafórico para mejorar la comunicación y el apoyo a las mujeres que se someten a una histerectomía.

Palabras clave: histerectomía, metáfora, discurso médico, lingüística de corpus.

¹ This publication forms part of the research project «Digitisation, processing and online publication of open, multilingual and gender-sensitive terminology resources in the digital society (DIGITENDER)» (TED2021-130040B-C21), funded by Ministerio de Ciencia e Innovación, Agencia Estatal de Investigación (10.13039/501100011033) and by the European Union «NextGenerationEU»/Plan de Recuperación, Transformación y Resiliencia.

ABSTRACT: The present study analyzes metaphorical expressions related to hysterectomy in a diverse corpus comprising scientific texts, Reddit forums, and patient-authored articles and blogs. The research aims to understand how hysterectomy is discursively constructed and experienced by women. The corpus reveals a range of metaphors from clinical descriptions to personal and creative expressions. The analysis shows that metaphors not only reflect but also influence women's perceptions of their bodies and the procedure. The study identifies metaphors including the uterus as a 'tenant' or 'kidnapper,' and the procedure as an 'eviction' or a 'robbery', highlighting the emotional and psychological aspects of hysterectomy. Limitations include the corpus size, lack of metadata to establish more correlations, and its Western-centric perspective, suggesting the need for more inclusive research. The study contributes to the discourse on women's health, emphasizing the role of language in shaping medical experiences. It underscores the need for understanding metaphorical language to improve communication and support for women undergoing hysterectomy.

Key words: hysterectomy, metaphor, medical discourse, corpus linguistics.

1. INTRODUCTION

In 2021, Joanna Glen published a book titled *All My Mothers*, which narrates the story of Eva from her early childhood to adulthood. As she grows into puberty, she develops endometriosis, leading to a hysterectomy. With her chances of bearing children gone, she eventually adopts the daughter of her best friend, who dies of breast cancer. The book addresses notions of motherhood and womanhood, as well as feelings of loss, emptiness, and hope, particularly related to women's health issues. Also in 2021, the movie *The Black Widow*, starring Scarlett Johansson (Natasha) and Florence Pugh (Yelena), features a scene where their long-lost father figure, Alexei (David Harbour), after being rescued from a Russian prison by them, asks if Yelena's aggressive attitude is due to her period. The scene unfolds as follows:

Alexi: Why the aggression, huh? Is it your time of the month? Yelena: I don't get my period dipshit. I don't have a uterus. Natasha: Or ovaries. Yelena: That's what happens when the Red Room gives you an involuntarily hysterectomy. They kinda just go in and rip out all your reproductive organs. They just get right in there and chop them all away. So you can't have babies. Alexi: OK, OK, you don't have to get so clinical and nasty! Yelena: I was just going to talk about fallopian tubes...

The scene is related to a thread from *Avengers: Age of Ultron*, in which Natahsa lays out to Bruce Banner what happens to the young women captured by Dreykov (Ray Winstone):

In the Red Room, where I was trained, where I was raised, they have a graduation ceremony. They sterilize you. It's efficient. One less thing to worry

about. The one thing that might matter more than a mission. It makes everything easier. Even killing ... You still think you're the only monster on the team?

Most recently, the popular Netflix shows *Virgin River* and the Spanish *Machos Alfa* include hysterectomy in their storylines. The former revolves around the main character, Mel, a woman who, after a miscarriage, decides to leave Los Angeles and move to a small village in Northern California. Apart from Mel's story, which is fraught with issues of infertility and the desire to be a mother, another character in the latest season, Ava, is used to highlight endometriosis and the necessity of a hysterectomy for leading a normal life. The latter portrays Luz, an independent and professional woman that wants to remain childless. However, her struggle with endometriosis faces her with the possibility of being hysterectomized to avoid suffering and future complications, an option that will make her reconsider notions of motherhood and fertility.

Though these four examples belong to literature and cinema, precisely because of their far-reaching power, they serve to actively push boundaries regarding typically under-discussed topics in society, such as motherhood and womanhood in relation to conditions such as endometriosis or cancer, and, in this case, to hysterectomy. This is not entirely an entirely new trend, as other voices have previously discussed hysterectomy in public outlets, but it is noteworthy that it is becoming more normalized in public discourse, despite being a procedure still widely unknown to the majority and stigmatized and tabooed in today's society.

This might come as a surprise, considering that hysterectomy is one of the most common minimally invasive surgeries performed in the USA, and by extension, in the world (Mattingly et al., 2023). In the USA, it is one of the most common procedures performed on women, totaling around 600,000 procedures per year, with approximately 10% being subtotal (cervix-preserving).

Since ancient times, the uterus has held significant psychological, sociological, and cultural importance, based on but also extending beyond its biological function. Notably, most studies on hysterectomy have primarily focused on the biomedical aspects. However, there is a growing number of studies addressing more biopsychosocial aspects, such as perceptions, beliefs, and experiences (Kinnick and Leners, 1995; Groff et al., 2000; Williams, 2000; Richter et al., 2001; Augustus, 2002; Flemming, 2003; Uksul, 2003; Linenberger & Cohen, 2004; Urrutia et al., 2013; Bossik et al., 2018; Li et al. 2023); different decision-making patterns depending on cultural backgrounds (Galavotti & Richter, 2000; Mingo et al., 2000; Lewis, 2000); education about hysterectomy, power relations, decision-making for or against the procedure, and the type of surgery (Lorentzen, 2000; Entwistle et al., 2006; Urrutia-Soto et al., 2008; Fredericks, 2013); and psychological sequelae, feelings of loss, the need for emotional support, and the interdependent relationships built before, during, and after a hysterectomy (Wade, 2000; Flori et al., 2005; Cabness, 2010; Goudarzi et al., 2022).

The following study aims to contribute to these discussions with a mixedmethods approach for discourse analysis of a corpus in English collected around the topic of hysterectomy. Specifically, the corpus contains a subcorpus collected with the tool SketchEngine of biomedical texts describing the procedure; a subcorpus from the social platform Reddit, where users can openly express their experiences and opinions; and a subcorpus of various blogs and news articles related to hysterectomy. The goal of this triple approach is to analyze the language used in different media related to this procedure and thus to gain a broader understanding of how hysterectomy is discursively constructed and experienced by the women who undergo it. The analysis places a special focus on metaphors, because, as Semino points out, «they express, reflect, and reinforce different ways of making sense of particular aspects of our lives» (Semino et al., 2018: 1). This goal is based on two premises. First, that the procedure itself will evoke different metaphors depending on the medium and context in which it is discussed, with more conventional and established metaphors in scientific and public communication literature, and more neologisms and creative metaphors in patient narratives found in online forums and blogs. Second, that the domain and type of metaphors will also vary depending on the reason for the hysterectomy, with some more related to loss and melancholy, while others will relate to domains that denote the removal of something unwanted.

2. HYSTERECTOMY AND HYSTERECTOMIES

To better understand how hysterectomy is discursively constructed, it is necessary to start with the term itself. The term «hysterectomy» derives from the Greek «hystera,» meaning «womb,» and «-ectomy,» a word-forming element meaning «surgical removal,» from the latinized form of Greek «-ektomia,» which means «a cutting out of» (Harper, n.d.). It refers to the surgical removal of the uterus or woman's womb, with different variations that can include the removal or retention of other organs such as the fallopian tubes, the cervix, and the ovaries. In a total hysterectomy, the surgeon removes the uterus and cervix, but not the ovaries. This is the most common type. A hysterectomy with oophorectomy includes the removal of one or both ovaries, and sometimes the fallopian tubes. When performing a radical hysterectomy, the surgeon removes the uterus, cervix, the top portion of the vagina, most of the tissue surrounding the cervix, and sometimes the pelvic lymph nodes. Finally, a supracervical, subtotal, or partial hysterectomy involves the removal of the body of the uterus but leaves the cervix intact. Hysterectomies can also be classified depending on the surgical technique used, including abdominal, where the uterus is removed through the abdomen via a surgical incision; vaginal, with the uterus being removed through the vaginal opening; laparoscopic, in which the uterus is removed through very small incisions on the lower abdomen either through laparoscopic tubes or through the vagina; and robotic, which uses a combination of high-definition 3D magnification, robotic technology, and miniature instruments to enhance a surgeon's ability to view, manipulate, and remove the uterus (Stanford Health Care, 2017).

Hysterectomy can be used to treat several different conditions, many of which have been considered «women's problems.» As outlined in the introduction, endometriosis is one of the conditions that can lead to a hysterectomy, while other conditions include fibroids, uterine prolapse, abnormal bleeding, adenomyosis, chronic pelvic pain, gynecological cancers such as ovarian, endometrial, or cervical cancer, endometrial hyperplasia, infection, and pelvic adhesions. Other circumstances that might lead to this surgery are gender reassignment procedures (Toze, 2018), as well as forced sterilization, as the example of Yelena showed us, or as was the common practice in Puerto Rico from the 1960s to the 1990s, with 46% of married Puerto Rican women having been hysterectomized by 1986 (Lazar, 2021).

3. THEORETICAL FRAMEWORK: CONCEPTUAL METAPHOR THEORY

Historically, metaphors have been primarily viewed as rhetorical devices. Aristotle's work, particularly in «Poetics» and «Rhetoric.» laid the foundation for understanding metaphors as figures of speech that involve an imaginative comparison: «Metaphor is the application of an alien name by transference either from genus to species, or from species to genus, or from species to species, or by analogy, that is, proportion» (Aristotle, 2008: XXI, 23). Fast forward to 1980, the landmark book «Metaphors We Live By» by George Lakoff and Mark Johnson marked a significant shift. They argued that metaphors are not just linguistic expressions but fundamentally shape our thoughts and actions. This cognitive linguistic perspective posited that metaphors are pervasive in everyday life, not just in language but in thought and action. Stemming from Lakoff and Johnson's work, Cognitive or Conceptual Metaphor Theory (CMT) suggests that metaphorical expressions in language reflect underlying conceptual metaphors. This theory has been influential in understanding how people conceptualize abstract domains (like emotions or time) in terms of more concrete experiences, and is currently the dominant paradigm in metaphor studies (Semino, 2008: 6) despite some critiques (Zhang, 2021). As Semino explains, conceptual metaphors are understood as a series of correspondences or «mappings» in which we use a source or known domain to conceptualize a target or unknown domain. For example, in Spanish, it is common to use the terms «vaciado» or «vaciar» («emptying» or «to empty») to refer to hysterectomies, reflecting a pattern of thought that highlights a subtractive view of this procedure. Here, the source domain is spatial perception, whereas the target domain is the surgical procedure. Though this metaphor might be culturally motivated as it is not present in other languages or cultures, it is a valid example of how providers and women can use this particular metaphor to frame their experience as something that has left a hollow space within them.

According to Semino et al. (2018), framing can be approached from three main intertwined perspectives on metaphor: cognitive, discourse-based, and practice-based. The cognitive approach defends the notion of metaphor-as-thought and conceptualizes them as a device for organizing our knowledge and understanding of reality. From a discourse perspective, the form and functions of metaphor are studied in authentic language use, considering sociolinguistic aspects such as who uses metaphors, why, in which contexts, and with what possible effects and consequences. Finally, the practice perspective aims to explain how metaphors facilitate or hinder communication in different institutional settings, with the goal of making recommendations for or against the use of metaphors.

Though linguists classify metaphors in several ways and there is no definitive consensus, as these classifications can be arbitrary, cognitive linguists distinguish between conceptual and image metaphors. According to Tercedor Sánchez and Casado Valenzuela (2018), conceptual metaphors are more complex than image metaphors, as the former rely not only on resemblance but also on behavior and/or functionality. For instance, image metaphors can reflect either physical realities or mental images, such as the form of an organ when we say that the gallbladder resembles a strawberry in the term «strawberry gallbladder» to refer to diffuse cholesterolosis, or when we describe feeling bloated as feeling like an inflated balloon inside. Interestingly, the authors, who conducted an experiment with different users using metaphorical images, conclude that

there is a preference for metaphorical over non-metaphorical images for illustrating medical concepts, pointing to their usefulness as knowledge-dissemination material. Furthermore, Lakoff and Johnson (1980) postulate four types of conceptual metaphors: imagistic, orientational, ontological, and structural.

Imagistic metaphors are based on images and often involve a direct visual or sensory correlation between two concepts. An imagistic metaphor creates a vivid picture in the mind, making it easier to understand an abstract concept. For example, «The light of my life» is an imagistic metaphor where light, a sensory experience, is used to represent the significance and joy another person brings into someone's life. Orientational metaphors involve spatial orientation and are grounded in our physical and cultural experiences. They often use spatial concepts (up-down, in-out, front-back) to give abstract concepts a direction or location. For instance, «happy is up» as in «I'm feeling up» or «sad is down» as in «I'm feeling down.» These metaphors are based on our physical experiences with gravity and our environment. Ontological metaphors allow us to comprehend a wide range of experiences, including emotions, ideas, activities, and complex phenomena, by equating them with objects and substances. This type of metaphor gives an abstract concept a more concrete form. For example, «Time is money» treats time as a valuable resource that can be spent, saved, or wasted, just like money. Finally, structural metaphors involve understanding one concept in terms of another, more concrete concept, but in a more systematic or structured way than imagistic metaphors. They provide a framework for thinking about an abstract concept by using the structure of a more concrete or familiar concept. An example is «Argument is war,» where we use terms and concepts related to war (attack a position, defend an argument, strategy, etc.) to talk about arguments.

Critiques to the Conceptual Metaphor Theory focus on methodology, direction of analysis, schematicity, embodiment, and the relationship between metaphor and culture (Kövecses, 2008, p.168). Despite some valid points, CMT continues to be the most widely used and accepted approach for the study of metaphor, as many of the most recent studies on metaphor demonstrate.

3.1. METAPHOR AND MEDICINE

One might be tempted to think that, due to its scientific nature, medical culture, clinical practice, and training would tend to prefer objective, literal scientific language. However, metaphor has been a common tool for conceptualizing clinical encounters, as it can help settle on concepts productively or unproductively (Bleakly, 2017: 206). Doctors often use metaphors for diagnostic purposes, fundamentally at the level of analogy, resemblance, or aphorism in pattern recognition, and it is often a device to enhance communication. Common metaphors include a mechanical conceptualization of the body as a machine that needs to be managed, or illness as a «war,» «battle,» or «fight» that needs to be won. As Bleakly explains (p. 2), «metaphor offers a heuristic, perhaps even a comfort blanket, in the absence of clear diagnosis and abundant uncertainty.» However, when analyzed from a critical point of view, metaphors can also at times lead to misunderstanding or create power imbalances that taint how certain illnesses, procedures, or natural processes such as menopause (Vargas-Sierra, 2023) are portrayed.

There is an abundant number of studies that research metaphor in different medical contexts and conditions, including the use of visual metaphors to represent medical knowledge (Tercedor Sánchez and Casado Valenzuela, 2018); cancer (Gibbs, 2002; Semino et al., 2004; 2015; 2017; 2018; Navarro Ferrando, 2017; Magaña 2020; Láinez Ramos-Bossinia & Tercedor Sánchez, 2020), aphasia (Fu, 2023); depression (Forceville & Palling, 2021); and fertility treatments (Delaunay et al., 2021), among many others.

As for the most prevalent metaphors in different domains of medicine, a few that seem to be quite representative of illnesses, conditions, or natural processes such as menopause. The BATTLE/WAR metaphor (ILLNESS IS WAR) is a prevalent source domain that is applied to various target domains, indicating a struggle or conflict. For instance, Fu (2023) identifies six conceptual metaphors related to aphasia, among which one is «experiencing aphasia is a battle.» The JOURNEY metaphor (ILLNESS IS A JOURNEY) is another widely used source domain that can be applied to different experiences, indicating a process or progression over time. Many cancer patients use specific journey-related words like «travel,» «trip,» «path,» and «destination» to define their experience. As Magaña (2020) finds, the most common metaphors in cancer patient narratives were in the domain of violence or the domain of journey, with the latter referring to motion along a path. We also find the MECHANICAL metaphor (BODY IS A MACHINE), conceptualizing the body as a machine that works or is defective/nonfunctional. As an example, Delaunay et al. (2021) explain how the infertile body is metaphorically framed as a defective machine, well-related to notions of productivity and competitiveness, with all the associated consequences. Vargas-Sierra (2023) also identifies metaphors related to menopause in this framework, with expressions such as «programmed obsolescence» or «defective machine» to refer to women's bodies entering the climacteric.

3.2. METAPHOR AND HYSTERECTOMY

As we have seen, metaphor is employed as a linguistic tool to help articulate knowledge and experiences by providing a means to express complex emotions and abstract concepts. The use of metaphorical language, both in scientific literature and patient narratives, enables a deeper comprehension of complex concepts and allows patients to regain a sense of personal voice and control during their healing process. It can synthesize past experiences with new ones and incorporate the body into understanding. Specifically, in the case of hysterectomy, several authors have studied how patients use language to express their experiences and emotions.

Dell and Papagiannidou (1999) draw on feminist post-structuralist theory to examine how experience following hysterectomy is constituted in relation to patriarchal and medical discourses. Their paper explores the experiences of Greek women following hysterectomy and oophorectomy, focusing on societal discourses that construct and regulate their bodies. The authors analyze the metaphoric language that shapes and reflects the cultural and socio-historical context of these experiences. They reveal that the metaphoric language used by the women often portrays the body as pathologized and uncontrollable. For some, the absence of the uterus and ovaries is metaphorically associated with a loss of control and femininity. However, for others, hysterectomy is metaphorically represented as a liberating experience, resisting patriarchal discourses that privilege reproductive capacity as a measure of completeness and sexuality.

Tovar (2006) explores medical and cultural perspectives on female reproductive health, focusing on topics such as hysterectomies, menopause, and the negative portrayal

of women's reproductive functions. She critiques the medical system and highlights the lack of options and dismissive attitudes towards women's reproductive health. Tovar uses metaphor to convey the deeply personal and often traumatic experience of undergoing a hysterectomy, as well as the cultural and medical perceptions of women's reproductive health. She describes her own experience on the operating table as akin to lying on a «sacrificial stone,» ready to offer an organ to the «Gods of medicine.» This metaphor illustrates the sense of vulnerability and the feeling of being at the mercy of the medical establishment. Additionally, she compares her removed uterus to a «pumpkin the color of an eggplant» and her affected ovary to a «giant purple spider,» providing vivid images that externalize the internal experience and offer a visual representation of her physical condition.

Elmir et al. (2010; 2014) explore the use of metaphor in women who underwent an emergency hysterectomy following childbirth. Metaphors emerge as a powerful tool within these women's narratives, providing insight into their emotional and psychological states. For example, one woman describes feeling as though «life had been sucked out of me,» conveying a profound sense of exhaustion and loss of vitality. The concept of «moving forward» also emerges as a major theme, with metaphors used to express the transformative journey these women undergo. The act of «remembering» and «storytelling» about their childbirth experience is linked to a «catalyst» that enables women to process the birth, make sense of it, and resolve negative feelings associated with the experience. The metaphor of «rechanneling» thoughts describes how one woman coped with her hysterectomy by accepting the situation and moving on.

Russell's dissertation (2017), titled «Hysterectomy, Metaphor, and Voice: An Exploratory Study of Surgery Experiences,» conducts an ethnographic study of women post-hysterectomy. Participants were presented with two narratives, a medical and a metaphorical one, to measure voice, baseline state anxiety (pre-STAI), and postexperimental condition state anxiety (post-STAI), as well as multidimensional Health Locus of Control (MHLC). The metaphorical narrative included expressions comparing the uterus to a vessel or vase, and medical issues leading to hysterectomy to a small initial crack, such as cancer. This metaphor extends to the idea that sometimes the whole vase (uterus) needs to be removed, and sometimes the flowers (possibly referring to other reproductive organs or tissues) may also need to be removed. The metaphorical narrative also touched on the emotional response to the surgery, with some women feeling a loss for their vessel, while others feel relief from pain or anxiety about potential future problems. The findings of this study show that metaphorical language didn't necessarily correlate with a greater sense of voice, with users preferring technical language to articulate their experiences, aligning with what is societally constructed (p. 48). This might be due to the fact that these narratives were artificially constructed and were not naturally produced by the patients.

Collectively, these studies reveal the complex and multifaceted ways in which women articulate their experiences and emotions surrounding this significant medical procedure, which range from the expression of vulnerability and trauma, as well as patriarchal discourses on women's reproductive roles, to the use of metaphor as a mechanism for transformation and coping.

4. A MIXED-METHODS APPROACH METHODOLOGY

The aim of this study is to conduct an exploratory analysis of the metaphors related to the surgical procedure of hysterectomy in different domains or settings: firstly, medical and general informational texts typically created by experts and addressed to potential patients from sites such as Wikipedia, MedlinePlus, the US government sites, etc., using seed words in the tool SketchEngine to extract texts, including 'hysterectomy,' 'partial hysterectomy,' 'subtotal hysterectomy,' 'supracervical hysterectomy,' 'full hysterectomy,' 'simple hysterectomy,' 'total hysterectomy,' 'complete hysterectomy,' 'Type I hysterectomy,' 'extrafascial hysterectomy,' 'abdominal hysterectomy,' 'open hysterectomy,' 'laparoscopic hysterectomy,' 'keyhole hysterectomy,' 'minimally invasive hysterectomy,' 'radical hysterectomy,' 'Wertheim's hysterectomy,' 'robotic hysterectomy,' 'robotic-assisted laparoscopic hysterectomy,' and 'Da Vinci hysterectomy,' collecting a mix of texts addressed mainly to non-experts and semiexperts; secondly, patient-generated content on the social network Reddit, where users anonymously ask for advice and share their experiences, specifically under the subreddit r/hysterectomy; thirdly, patient-generated content in more formal spaces such as news articles and personal blogs. This triple approach aims to offer an overview of the different types of metaphors that arise when discussing hysterectomy. The first subcorpus consisted of 562,853 tokens and 264 documents. The second subcorpus comprises contributions to the social network «Reddit» from the subreddit «hysterectomy,» with 17,000 members. These are available online and accessible without logging in at the URL https://www.reddit.com/r/hysterectomy/. The texts were collected manually by downloading the top posts for a year (https://www.reddit.com/r/hysterectomy/ top/?t=year), with the reasoning of selecting those that would be more representative as they had been upvoted the most. The downloaded pages were converted to text and cleaned to delete most of the repetitive content typical of the social platform (e.g., «Reply,» «Share,» «User avatar,» etc.). This resulted in a collection of over 300 posts with their comments, totaling 249,027 tokens. Interestingly, many of the top posts contained multiple images that also contained metaphorical tropes. Finally, the third subcorpus consists of a small sample of 6 selected blog and news articles written by women who have undergone a hysterectomy. These were found by conducting searches on Google with the key terms «hysterectomy» and «experience» in different news outlets and selecting them manually to establish some sort of representativeness as for the cause of the surgery. For instance, one article was about hysterectomy due to endometriosis, another due to fibroids and heavy periods, etc. The corpus contained a total of 11,454 tokens and its composition can be seen in Table 1:

	Title	Author and Medium	Reason	Publication Date
Article 1	The mid-life taboo that stripped me of my womanhood	Olivia Lichtenstein, Daily Mail	Emergency surgery, post- menopause	June 30, 2021
Article 2	A Hysterectomy Journal Take My Uterus, Please	Mariah Burton Nelson, The Washington Post	Heavy bleeding, pain. Endometriosis	August 12, 2003
Article 3	Letter of Recommendation: Hysterectomies	Jami Attenberg, The New York Times Magazine	Pain, uterine fibroids.	February 1, 2018
Article 4	In Her Own Words: Lena Dunham on Her Decision to Have a Hysterectomy at 31	Lena Dunham, Vogue	Endometriosis	February 14, 2018
Article 5	The Unexpected Grief of a Hysterectomy	Anna Holmes, The New Yorker	Uterine fibroids	April 1, 2023
Article 6	My experience of having a hysterectomy	Jo Printz, ABC Everyday	Painful periods, fibroids	April 5, 2021

Table 1. Overview of texts of Subcorpus 3

For the analysis of the first subcorpus, I employed a straightforward linguistic corpus-based research methodology. For the second subcorpus, I employed a hybrid methodology of linguistic analysis via corpus tools, as well as a more detailed discourse analysis methodology to identify the most significant creative metaphors in the corpus. Finally, for the third subcorpus, a purely discursive analysis methodology was used to analyze the main topics as well as the most salient metaphors used.

Corpus observation of language has, according to Deignan (2008:85), three main advantages over intuitive language analysis: first, the ability to store substantial amounts of text that surpass what human memory can retain, allowing for repetitive tasks to be performed accurately and more efficiently. Second, corpus research makes it possible to discover uses of words that are difficult to predict otherwise, something that is especially relevant to metaphorical expressions. Finally, using corpora helps to provide a less subjective analysis of the language as it contains the expressions of multiple users. Specifically for metaphor, working with corpora makes it easier to identify linguistic expressions considered metaphorical and relate them to their respective conceptual metaphors fitting in a semantic and conceptual system (Vargas and Moreno-Sandoval, 2021: 49), going from linguistic form to meaning in a bottom-up approach. This retrieval can be done in different ways, but it is mainly done by painstakingly checking different linguistic realizations of the conceptual metaphors that are the object of inquiry (Deignan, 2008: 93).

A widespread method to analyze conceptual metaphors is the Metaphor Identification Procedure (MIP) proposed by a group of scholars known as the Pragglejaz Group (2007). This procedure is based on the notion of «indirect meaning,» that is, after reading and identifying the lexical units in a text, it is necessary to establish its meaning in context and to determine if there is a contrast between that meaning and a more basic current meaning in other contexts than the one intended in the given context. If it does and the contextual meaning contrasts with the basic meaning and can be understood in comparison with it, then the unit is deemed metaphorical (Semino, 2008: 11-12). For instance, if a lexical unit like «route» is used in the context of hysterectomy, its contextual meaning has to do with the option chosen - for or against hysterectomy, or for the surgical type of hysterectomy (e.g., «laparoscopic route»). However, this is an indirect meaning, as it could be contrasted with the more basic meaning of a «traveled way» which involves using a physical route to move from one place to another. This method has been sometimes criticized as it does not account for historical metaphors, that is, words that have adopted other meanings over time by way of metaphor and are now accepted contemporary uses of the word. This might make this method subjective and, as Steen et al. (2010: 7) put it, can deem metaphor «a relational term». One of the issues with MIP is that it still requires analysts to make many decisions during the metaphor identification process, which could introduce variability and subjectivity in the results. Additionally, MIP focuses primarily on one particular manifestation of metaphor in discourse, specifically metaphorically used words, which means that its coverage is not exhaustive. These issues led to the development of MIPVU by Steen et al., a more reliable and systematic version of MIP. This method aims to clarify the decisions analysts must make when identifying words as metaphor-related. One reason I chose this method is its allowance for newly-formed words, such as the blends found in our Reddit subcorpus «yeeterus,» «yeetaversary,» and «yeetings,» derived from the verb «to yeet» (slang word that works with the meaning of «to throw») combined with the terms «uterus,» «anniversary,» and «greetings.» MIPVU, which stands for Metaphor Identification Procedure Vrije Universiteit, is a systematic set of instructions designed to enhance the reliability and explicitness of metaphor identification in linguistic research. These are described in Steen et al. (2010: 25):

- 1. Find metaphor-related words (MRWs) by examining the text on a word-by-word basis.
- 2. When a word is used indirectly and that use can potentially be explained by some form of cross-domain mapping from a more basic meaning of that word, mark the word as metaphorically used (MRW).

- 3. When a word is used directly and its use can potentially be explained by some form of cross-domain mapping to a more basic referent or topic in the text, mark the word as a direct metaphor (MRW, direct).
- 4. When words are used for the purpose of lexico-grammatical substitution, such as third-person personal pronouns, or when ellipsis occurs where words may be seen as missing, as in some forms of coordination, and when a direct or indirect meaning is conveyed by those substitutions or ellipses that can potentially be explained by some form of cross-domain mapping from a more basic meaning, referent, or topic, insert a code for implicit metaphor (MRW, implicit).
- 5. When a word functions as a signal that a cross-domain mapping may be at play, mark it as a metaphor flag (MFlag).
- 6. When a word is a newly-coined formation, examine the distinct words that are its independent parts according to steps 2 through 5.

Metaphors can be **clear** or **borderline**. **Borderline** metaphors are unclear either because of ambiguous context, or because the analysts cannot reach agreement after extensive group discussion. For the purposes of this study, though, I will focus only on **clear** metaphors, which can be in turn classified in **direct**, **indirect**, and **implicit** metaphors. For **indirect** metaphors, there is a contrast as well as comparison between the contextual and a more basic meaning. For **direct** metaphors, there is no contrast between the contextual and a more basic meaning. The contextual meaning is also the basic meaning. The comparison is expressed through direct language use. The **direct** language use may or may not be signaled by metaphor markers such as «like,» «as,» «as if,» «socalled» etc. **Implicit** metaphor is due to an underlying cohesive grammatical and/or semantic link in the discourse which points to recoverable metaphorical material. In the present study, I focused on indirect and direct metaphorical expressions specifically related to the procedure itself, the «hysterectomy,» as well as to the organs removed, with special emphasis on the «uterus».

5. RESULTS

5.1. SUBCORPUS 1: MEDICAL AND POPULAR SCIENCE TEXTS

As this subcorpus was compiled with Sketchengine, it was directly analyzed in this tool. The first step was to explore the corpus using the list of words and wordsketch. To focus on the most relevant terms and to avoid functional words, I used a stopword list to filter the results. Next, I proceeded to select the terms that, intuitively or because of the literature review, could potentially be MRWs. I identified a series of conceptual metaphors having a frequent word as a target domain, such as HYSTERECTOMY IS A PERFORMANCE:

- (1) The HUGOTM RAS system is flexible and highly performative in various surgical <u>scenarios</u>.(doc#51)
- (2) Persistent or recurrent pain after hysterectomy is one of the most frustrating clinical <u>scenarios</u> in benign gynecology. (doc#167)

(3) If a total hysterectomy is <u>performed</u>, the root operation will be resection, which is defined as the cutting out or off, without replacement, all of a body part. (doc#19)

In these cases we find a contrast between the basic meaning, which in this case we could define as «an outline or synopsis of a play» in the case of scenario and «to give a performance» in the case of «perform,» for the contextual meaning, which refers to «situations» and «carry out». This metaphor is reinforced by other examples such as the following one describing the surgeon sitting in front of the robotic-assisted laparoscopic equipment:

(4) A short distance away from the operating table, your surgeon sits in front of a piece of equipment that looks like a <u>video game console</u>. (doc#29)

Even though theater and video games are different, they share some common notions such as action happening in scenarios and actors/characters performing certain roles.

This metaphor is also closely related to the notion of hysterectomy considered as a TOOL for managing different conditions. This metaphor can be understood in the frame of BUSINESS, as if the conditions leading to hysterectomy are business issues or hurdles that have «failed» to heal.

- (5) Still, hysterectomy remains the most appropriate <u>management option</u> for many patients. (doc#152)
- (6) Robot-assisted surgery has emerged as an additional surgical <u>tool</u> for the management of endometriosis. (doc#201)
- (7) For most of the conditions mentioned above (apart from cancer), hysterectomy is usually considered as a last resort after other treatments have <u>failed</u>. (doc#111)

All these metaphors are quite conventional metaphorical expressions in the surgical domain but still represent a contrast between a basic meaning and the intended meaning, and can therefore be classified as indirect. Another common framing of hysterectomy is as a WAY, with examples that denote that is a «common route» or a «pathway» to solve certain gynecological conditions:

- (8) At the 17-year follow-up, the <u>route</u> of hysterectomy is not associated with a difference in recurrence, grade, or subsequent treatment of prolapse when the indication for hysterectomy is considered. (doc#218)
- (9) An abdominal hysterectomy is the most <u>invasive route</u> of tissue removal. (doc#246)

Finally, the corpus revealed some less common metaphors, such as HYSTERECTOMY IS A WEAPON. This metaphorical expression could work in combination with other words such as «invasive» in «invasive procedure,» «approach»

in «surgical approach,» or even «operation» and «intervention,» that might have military connections even though they are used with their medical meaning in this context:

- (10) The abdominal hysterectomy is a basic component in the <u>armamentarium</u> of any pelvic surgeon. (doc#19)
- (11) However, this surgical option remains important in the surgical <u>arsenal</u>, because it can be offered to patients unfit for laparotomy or laparoscopy due to comorbidity, or those unable to support prolonged Trendelenburg position or pneumoperitoneum. (doc#160)
- 5.2. SUBCORPUS 2: REDDIT

The Reddit corpus exclusively contains contributions from patients who are planning to have or have undergone a hysterectomy. Due to the user-based, spontaneous nature of these texts, most creative metaphors were found here. Working with Sketch Engine, the list of words, and wordsketch for both «hysterectomy» and «uterus» allowed the identification of several conceptual metaphors. This top-down approach, though not exhaustive as it doesn't allow for the discovery of all metaphors in the corpus (Vargas-Sierra & Moreno-Sandoval, 2021: 54), had the advantage of enabling us to focus on the two concepts we wanted to cover. It also helped in avoiding too much noise from other metaphors that might be present in the corpus but are related to adjacent topics, such as the conditions leading to a hysterectomy. Each of these conditions could be the subject of a separate research project.

Specifically, one of the most common metaphors is comparing the uterus to a TENANT and the process of hysterectomy to an EVICTION. This tenant is described as a bad tenant that doesn't pay rent and acts in an inconsiderate way:

- (12) It's like the horrible <u>tenant</u> who never pays rent, gets <u>evicted</u>, and makes sure to smear shit on the walls before they leave.
- (13) The <u>eviction notice</u> had been served and my damn uterus is putting up a fight.
- (14) Happy 3 years since my Uterus was <u>evicted</u> !
- (15) My uterus is the size of 6 months pregnancy, <u>veeting</u> it on Tuesday.

In this context, some neologisms were also found that combine the word «uterus» and «yeeting» and using the ending of uterus to create Latin-like expressions in an attempt to humorously talk about this traumatic experience for most:

- (16) I should've definitely said <u>yeeterus completerus</u>!
- (17) <u>Yeeterus Completerus</u> as of this morning!

A related metaphor was the UTERUS/PERIOD as a MONTHLY SUBSCRIPTION and HYSTERECTOMY as a CANCELLED MONTHLY SUBSCRIPTION. This metaphor might hint at the periodicity of periods and their perception as something bothersome or unnecessary. This metaphor was elicited by users having posted pictures of a t-shirt and a mug with this same sentence (Images 1 and 2).



Image 1. T-shirt «I'm Here to Cancel my MONTHLY Subscription» and an image of the uterus

Image 2. Mug «MONTHLY Subscription Cancelled» and an image of the uterus



As described by Steen et al. (2010), personification can also be considered metaphorical as the metaphorical tension is based on a comparison between human and non-human. The Reddit corpus revealed quite a few instances of personification, with the uterus being described as «pesky,» «angry,» «jerk,» «bastard,» «bitch,» or «damn,» hinting again at a conflicting relationship with this organ, especially for those suffering from different ailments that cause pain or discomfort. It is perceived as inconvenient, problematic, uncomfortable, probably as a coping mechanism for all the pain these patients have endured:

- (18) Your <u>jerk</u> of a uterus is having an extinction burst.
- (19) No matter how terrified I am of the surgery, my <u>bastard</u> uterus is sure to do something awful right beforehand to get me in the right frame of mind!
- (20) I'm stronger than I ever was- and I don't have to worry about my <u>angry</u> uterus.
- (21) The eviction notice had been served and my <u>damn</u> uterus is <u>putting up a</u> <u>fight</u>.
- (22) So happy for you and all the things you will do without that <u>pesky</u> uterus getting in your way.
- (23) I told her I wanted that <u>bitch</u> out (she laughed and slapped the table at that), and said she'd have her nurse call to schedule surgery.

There are a few instances where the uterus is «missed», also as a person that has left or is no longer with us. These examples are usually related to sexual function or fertility issues:

(24) I 10 weeks and <u>miss my uterus</u> and am concerned about sex I've cried so much since Day 3.

Two more metaphors that were elicited by pictures were the HYSTERECTOMY is a FUNERAL, where UTERUS are LADY PARTS, as two users enacted a funeral as a farewell ceremony of the uterus of a friend, and UTERUS is a ROCKETSHIP, a picture that a daughter made for her mother undergoing hysterectomy. Though these are hapaxlegomena, they serve to illustrate the creativity patients and family members show when trying to cope with their realities.

Image 3. Drawing of uterus as a Rocketship, authored by one of the Reddit members



5.3. SUBCORPUS 3: BLOGS AND NEWS ARTICLES

To analyze the articles of the third subcorpus I adopted a discursive analysis approach where I read each of them carefully and manually highlighted the MRWs I could identify related to the procedure «hysterectomy» as well as to the organ being removed, the «uterus». Interestingly, in this corpus we also find negative framings of the organ, the uterus, as well as personifications («torturer», «dick», «evil child»), with the uterus being identified as something that «causes pain or trouble» (art#3) and «a home for no one» (art#4).

- (25) This <u>thing</u> that had <u>tortured</u> me for years had disappeared, in a snap. (art#3)
- (26) The <u>problem</u> had been removed.
- (27) «Your uterus has been kind of a <u>dick</u>,» she said. «I want you to write a breakup letter to it and then take a bat to the piñata I'm going to buy and say goodbye to it forever.» (art#5)
- (28) It appears normal, cheerful in blonde pigtails like little <u>Rhoda the evil</u> <u>child from the classic film, but it's angry, exhausted, a home for no one</u>. (art#4)

The MECHANICAL metaphor is also used frequently, framing the uterus as a device or machine that does not work properly and needs to be gotten rid of, sometimes to the chagrin of the patient. An example is the case of actress Lena Dunham, who lost her uterus due to endometriosis and, as such, saw her wish to become a mother shattered.

- (29) After all, these <u>parts</u> of mine had done their job, they'd grown and produced two children. I should, I decided, thank my uterus for its splendid service, salute it, bid it farewell and move on. (art#1)
- (30) Lastly, I ask the likelihood of my ovaries' dying before I can harvest any eggs, of menopause setting in. Of finally losing every <u>part</u>. (art#4)
- (31) I just sense that the uterus I have been given is <u>defective</u>. (art#4)

This is the patient whose narrative contains most negative images of the uterus, using imagistic metaphors such as BLACK HOLE, but also ontological metaphors such as a BAD BOYFRIEND, a BAD SEED, and in a rather creative turn, CHINATOWN CHANEL PURSE OF NIGHTMARES. By doing so, Lena highlights her internal conflicting relationship with her uterus as an organ that has caused her harm but, at the same time, provokes nostalgia because she will never be able to use it for its intended function of bearing a child:

- (32) I'm forced to stare at the <u>black emptiness</u> of my uterus (...) And I laugh and smile, but I know that the <u>blank space</u>, the <u>black hole</u> that is an empty womb captured on-screen, is all I'll ever see. (art#4)
- (33) Medical-malpractice suits are real, and women are attached to their uteruses (for me, an almost blind, delusional loyalty, like I'd have to a <u>bad</u> <u>boyfriend</u>) (art#4)
- (34) If there is any upside to this irony, by the end it seems as if my doctors may finally be ready to concede that my uterus really is a <u>bad seed</u>. (art#4)
- (35) It's the <u>Chinatown Chanel purse of nightmares</u>, full of both subtle and glaring flaws. (art#4)

Other more rare but creative metaphors that reinforce the negative image of the organ include UTERUS is a KIDNAPPER (35), UTERUS is a CRUSHING WEIGHT (36) or UTERUS is an APPENDIX (37). Further, some metaphors also intend to be humorous to downplay some of the feelings, such as UTERUS is a FRUIT BASKET (8, and UTERUS is a SWISS CHEESE (39):

- (36) My lived experience and my long-held personal stance on pregnancy and birth was just as relevant as the doctor's medical knowledge, and perhaps communicating more of that would have resulted in fewer years living like a hostage for 3-5 days every month. (art#6)
- (37) Now, a few months out from her surgery, she said that she's never felt better: a <u>crushing weight</u> has been lifted up and out. (art#5)
- (38) As far as I'm concerned, my uterus was about as useful as an <u>appendix</u>. (art#6)
- (39) I joked aloud that, with all these comparisons to fruit, my uterus sounded like it resembled a <u>gift basket from Harry & David</u>. (art#5)
- (40) Myomectomies are not uncommon, and I'm not one to be grossed out, but I felt a wave of nausea when I learned that the removal of my fibroids would make my uterus look, at least initially, a little bit like <u>Swiss cheese</u>. (art#5)

As for the procedure itself, specially one of the articles shares feelings of shame due to the stigma some women might feel losing their uterus entails, framing hysterectomy as a MIDLIFE SHAME. As Li et al. argue (2023), «because of the feeling of illness stigmata, many women will choose to hide the condition from their surroundings and refuse to seek help from their surroundings». This can be seen in examples (40) to (42). Here the uterus is also is seen as a STOLEN GOOD (43) or LOSS

- (41) It's a source of great comfort to us that we are able to travel this path together, for this is the midlife shame no woman cares to discuss. (art#1)
- (42) Shall I tell of the <u>surgery that dares not speak its name</u>: whisper it a hysterectomy? (art#1)
- (43) Instead we laugh with relief at being able to share our <u>shameful secret</u>. (art#1)
- (44) I wasn't prepared for the deep loss I would feel, the sense that I'd been drugged and abducted and had my uterus <u>stolen</u> from me. (art#1)
- (45) I am losing my uterus soon. I say «<u>losing</u>» instead of, for example, «having removed» because it feels like a <u>loss</u>-the end not just of any remaining fertility I might possess but of a marker of my maturity that has existed for almost forty years. (art#5)

Finally, it is worth noting some more creative metaphors that frame hysterectomy as a PLUMBING JOB (45), a BIG DEAL (46), and a SPACESHIP (47):

- (46) In the face of his light-hearted approach, I initially was determined to treat my own impending 'procedure' as little more than a <u>plumbing job</u>. (art#1)
- (47) A <u>big deal</u>. I guess I'd been so focused on managing the symptoms, then figuring out how to fix the problem, that I hadn't spent much time thinking about the trauma of the surgery itself. (art#2)
- (48) By the time I was 43, my uterus had turned into something like a <u>floating</u>, <u>abandoned spaceship</u> upon which <u>alien life forces</u> had attached themselves, wreaking havoc on its <u>mainframe</u>. (art#3)

6. LIMITATIONS OF THE STUDY AND DISCUSSION

This study has focused on analyzing metaphorical expressions in a corpus compiled in English across different spaces: scientific and popular science texts found on reputable online portals; post forums on Reddit; and newspaper and blog articles written by patients. Needless to say, the first limitation of this study is the size of the corpus, as its size and composition might not constitute a representative sample of all discourse related to hysterectomy. However, I contend that this methodology accounts for a wide spectrum of discourse samples, providing a good overview of how hysterectomy is constructed in the public sphere and how women articulate their experiences. Another limitation that could be argued is its cultural scope, with a clear focus on Western perspectives, as most texts were produced by speakers from the US, UK, and Australia. This might be problematic because some views might not be represented. For instance, as Sardeshpande (2014) explains, women in India might not have a strong attachment to their uterus because once they are done having children, they consider this organ a

(44):

nuisance. On the other hand, in other cultures, such as in Uganda, women, family members, and society have irrational perceptions of infertile women, which in turns puts great pressure on postoperative infertile women (Ariho & Nzabona, 2019). Finally, this preliminary study is a descriptive approach that analyzed metaphors in hysterectomy, focusing on two main concepts: the surgical procedure itself and the organ being removed, the uterus. Furthermore, the top-down approach that starts with intuitions, most common words, and previous literature, makes it impossible to cover all the metaphors present in the corpus. Additionally, as I have hinted at in the results, the nature of the metaphors might be correlated with the reason for undergoing this surgery, something that future studies should address in a more systematic way. This would involve considering different variables, such as the reason for the hysterectomy, the type of surgical procedure, age, the desire or lack thereof to be a mother, and economic, racial, and educational backgrounds, etc., to establish correlations and possible causes.

7. CONCLUDING REMARKS

The goal of this study was to perform a nuanced exploration of the metaphorical language surrounding hysterectomy, covering various domains from medical texts to personal narratives on social platforms and blogs. The findings shed light on the diverse and complex ways in which hysterectomy is conceptualized and discussed, revealing a wide range of metaphorical expressions that range from clinical descriptions to deeply personal and creative metaphors.

The study underscores the significance of metaphor in shaping our understanding and perception of medical procedures. In the realm of hysterectomy, metaphors not only reflect but also influence how women perceive their bodies, their health, and their identity. While the first subcorpus frames hysterectomy as a play to be performed or a business to be managed in an aseptic way, the other two subcorpora focus more on the psychological dimension of this procedure and how women articulate it. The varied metaphors, from mechanical to personal and even humorous, highlight the multifaceted nature of women's experiences with hysterectomy, and serve as a lens through which the emotional, psychological, and social dimensions of this medical procedure are viewed and understood. This aligns with the description of one of the patient narratives included in our Subcorpus 3 (art#1), where she contends that in medical school the procedure is taught only from the biomedical perspective, without addressing other dimensions of it:

«Mr. Saso's first name is Srdjan, pronounced 'surgeon' — his destiny was clearly chosen at birth.

When I spoke to him in connection with this piece, he told me that when he was in training, no one addressed the issue that you might be removing something that has real emotional resonance for a woman: 'Any discussion of the psychological effects of hysterectomy was the elephant in the room, both for the male and female students.»

Thus this research contributes to the ongoing discourse on women's health, particularly in the context of hysterectomy. It highlights the power of language in medical narratives and opens up new possibilities for understanding and supporting women's

health experiences. Metaphor is without doubt yet another piece which turns out to be crucial to recognize how not just the discourse but also the lived experiences of those who undergo medical procedures like hysterectomy are shaped.

REFERENCES

- Ariho, Paulino., & Nzabona, Abel. (2019). Determinants of change in fertility among women in rural areas of Uganda. Journal of pregnancy, 2019.
- Aristotle. (2008). *Poetics*. Translated by S.H. Butcher. Penguin Classics. (Original work published Bekker 1447a8-13).
- Augustus, Charles E. (2002). Beliefs and perceptions of African American women who have had hysterectomy. *Journal of Transcultural Nursing*, 13(4), 296-302.
- Bleakley, Alan. (2017). Thinking with metaphors in medicine: the state of the art. Routledge.
- Bossick, Amy S., Sangha, Rajpreet, Olden, Heather, Alexander, Gwen L., & Wegienka, Ganesa. (2018). Identifying what matters to hysterectomy patients: postsurgery perceptions, beliefs, and experiences. *Journal of Patient-Centered Research and Reviews*, 5, 167-175. https://doi.org/10.17294/2330-0698.1581
- Cabness, Jennifer. (2010). The psychosocial dimensions of hysterectomy: private places and the inner spaces of women at midlife. *Social Work in Health Care*, 49(3), 211-226.
- Deignan, Alice. (2008). Corpus linguistics and metaphor. John Benjamins Publishing Company.
- Delaunay, Claire, Santos, Maria Jose., & Gouveia, Luís. (2021). In-vitro metaphors: ART beneficiaries' meaning-making about human embryos in the context of IVF in Portugal. *Reproductive Biomedicine & Society Online*, 13, 62-74.
- Dell, Patricia, & Papagiannidou, Sofia. (1999). Hysterical talk? A discourse analysis of Greek women's accounts of their experience following hysterectomy with oophorectomy. *Journal of Reproductive and Infant Psychology*, 17(4), 391-404.
- Fleming, Victoria. (2003). Hysterectomy: a case study of one woman's experience. *Journal of Advanced Nursing*, 44(6), 575-582.
- Flory, Nathalie, Bissonnette, Francoise, & Binik, Yitzchak M. (2005). Psychosocial effects of hysterectomy: literature review. *Journal of Psychosomatic Research*, 59(3), 117-129.
- Forceville, Charles, & Paling, Stephen. (2021). The metaphorical representation of depression in short, wordless animation films. *Visual Communication*, 20(1), 100-120.
- Fu, Jie. (2023). *Metaphor use in aphasia*. (Doctoral dissertation, Netherlands Graduate School of Linguistics).
- Galavotti, Christine, & Richter, Deborah L. (2000). Talking about hysterectomy: the experiences of women from four cultural groups. *Journal of Women's Health & Gender-Based Medicine*, 9(2, Supplement 2), 63-67.
- Gibbs, Raymond., & Franks, Herbert. (2002). Embodied metaphor in women's narratives about their experiences with cancer. *Health Communication*, 14(2), 139–165. https://doi.org/10.1207/S15327027HC1402_1
- Goudarzi, Farideh, Khadivzadeh, Talat, Ebadi, Abbas, & Babazadeh, Raziye. (2022). Women's interdependence after hysterectomy: a qualitative study based on Roy adaptation model. *BMC Women's Health*, 22(1), 40.

- Groff, Jennifer Y., Mullen, Patricia D., Byrd, Theresa, Shelton, Amy J., Lees, Elizabeth, & Goode, Judith. (2000). Decision making, beliefs, and attitudes toward hysterectomy: a focus group study with medically underserved women in Texas. *Journal of Women's Health & Gender-Based Medicine*, 9(2, Supplement 2), 39-50.
- Harper, Douglas. (n.d.). Etymology of hysterectomy. *Online Etymology Dictionary*. Retrieved January 12, 2024, from <u>https://www.etymonline.com/word/</u> <u>hysterectomy</u>
- Kinnick, Valerie, & Leners, Deborah. (1995). The hysterectomy experience: an ethnographic study. *Journal of Holistic Nursing*, 13(2), 142-154.
- Kövecses, Z. (2008). Conceptual metaphor theory: Some criticisms and alternative proposals. *Annual review of cognitive linguistics*, 6(1), 168-184.
- Lainez Ramos-Bossini, Alejandro J., & Tercedor Sánchez, María Isabel. (2020). Epatients in Oncology: a corpus-based characterization of medical terminology in an online cancer forum.
- Lakoff, George, & Johnson, Mark. (1980). *Metaphors we live by*. University of Chicago Press, Chicago, IL.
- Lazar, Alexandra. (2021). La operación: Coerced Sterilization of Puerto Rican Women in the 20th Century. *Honors Theses*, 2427. Retrieved from https://digitalworks.union.edu/theses/2427
- Lewis, Carol E., Groff, Jennifer Y., Herman, Connie J., McKeown, Robert E., & Wilcox, Linda S. (2000). Overview of women's decision making regarding elective hysterectomy, oophorectomy, and hormone replacement therapy. *Journal of Women's Health & Gender-Based Medicine*, 9(2, Supplement 2), 5-14.
- Li, Na, Shen, Chen., Wang, Rao, & Chu, Zhiping (2023). The real experience with women's hysterectomy: A meta-synthesis of qualitative research evidence. Nursing Open, 10(2), 435-449.
- Linenberger, Holly, & Cohen, Shelly. (2004). From hysterectomy to historicity. *Health Care for Women International*, 25(4), 349-357.
- Lorentzen, J. M. (2000). Medical power relations and elective hysterectomy. Michigan State University. Dissertation.
- Magaña, Denise. (2020). Praying to win this battle: Cancer Metaphors in Latina and Spanish Women's Narratives. *Health Communication*, 35(5), 649-657.
- Mattingly, Ashley S., Chen, Michelle M., Divi, Venu, Holsinger, F. Christopher, & Saraswathula, Anirudh. (2023). Minimally Invasive Surgery in the United States, 2022: Understanding Its Value Using New Datasets. *Journal of Surgical Research*, 281, 33-36.
- Mingo, Chandra, Herman, Connie J., & Jasperse, Marianne. (2000). Women's stories: ethnic variations in women's attitudes and experiences of menopause, hysterectomy, and hormone replacement therapy. *Journal of Women's Health & Gender-Based Medicine*, 9(2, Supplement 2), 27-38.
- Navarro Ferrando, Ignasi. (2017). Conceptual metaphor types in oncology. *Ibérica*, 34, 163-186.
- Pragglejaz Group (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor and symbol*, 22(1), 1-39.

- Richter, Deborah L., Corwin, Sarah J., Rheaume, Carol E., & McKeown, Robert E. (2001). Perceptions of alternative therapies available for women facing hysterectomy or menopause. *Journal of Women & Aging*, 13(4), 21-37.
- Russell, Katherine M. (2017). Hysterectomy, metaphor, and voice: an exploratory study of surgery experiences. (Doctoral dissertation, Antioch University).
- Sardeshpande, Neha. (2014). Why do young women accept hysterectomy? Findings from a study in Maharashtra, India. *International Journal of Innovation and Applied Studies*, 8(2), 579.
- Semino, Elena. (2008). Metaphor in discourse (p. 81). Cambridge University Press.
- Semino, Elena, Demjén, Zsófia, & Demmen, Jane. (2018). An integrated approach to metaphor and framing in cognition, discourse, and practice, with an application to metaphors for cancer. *Applied Linguistics*, 39(5), 625-645.
- Semino, Elena, Demjén, Zsófia, Hardie, Andrew, Payne, Sheila, & Rayson, Paul. (2015). The online use of Violence and Journey metaphors by patients with cancer, as compared with health professionals: a mixed methods study. *BMJ Supportive & Palliative Care*.
- Semino, Elena, Demjén, Zsófia, Hardie, Andrew, Payne, Sheila, & Rayson, Paul. (2017). *Metaphor, cancer and the end of life: A corpus-based study*. Routledge.
- Semino, Elena, Heywood, John, & Short, Mick. (2004). Methodological problems in the analysis of metaphors in a corpus of conversations about cancer. *Journal of Pragmatics*, 36(7), 1271-1294.
- Stanford Health Care. (2017). Types -Our Approach to Hysterectomy. Retrieved September 12, 2017, from <u>https://stanfordhealthcare.org/medical-treatments/</u> <u>h/hysterectomy/types.html</u>
- Steen, Gerard, Dorst, Aletta G., Herrmann, J. Berenike, Kaal, Anna, Krennmayr, Tina, & Pasma, Trijntje. (2010). A method for linguistic metaphor identification. John Benjamins Publishing Company.
- Sánchez, M. T., & Valenzuela, A. C. (2018). Visual metaphors in representing medical nowledge. *Linguistica Antverpiensia*, 17, 174-195.
- Tovar, Patricia. (2006). De historias, histerias e histerectomías: la construcción de los discursos médicos y los imaginarios sobre la reproducción femenina. In Viveros Vigoya, Mara (Ed.), *Saberes, culturas y derechos sexuales en Colombia* (pp. 35-61). Tercer Mundo, CLAM, Universidad Nacional de Colombia Centro de Estudios Sociales.
- Toze, M. (2018). The risky womb and the unthinkability of the pregnant man: Addressing trans masculine hysterectomy. *Feminism & Psychology*, 28(2), 194-211.
- Urrutia, María Teresa, Araya, Alejandra, & Riquelme, Patricia. (2008). Satisfacción con la educación recibida en un grupo de mujeres histerectomizadas. *Ciencia y Enfermería*, 14(1), 33-42.
- Urrutia, María Teresa, Araya, Alejandra, Flores, Carolina, Jara, Daniela, Silva, Sandra, & Lira, María José. (2013). Histerectomía: la experiencia de no tener útero para un grupo de mujeres chilenas. *Revista Chilena de Obstetricia y Ginecología*, 78(4), 262-268.
- Uskul, Ayse, Ahmad, Farah, Leyland, Nicholas A., & Stewart, Donna E. (2003). Women's hysterectomy experiences and decision-making. *Women & Health*, 38(1), 53-67.

- Vargas-Sierra, Chelo., & Moreno-Sandoval, Antonio. (2021). War and health metaphors in financial discourse: The case of «Letter to Shareholders» in annual reports. *Metaphor in Economics and Specialised Discourse*, 41-71.
- Vargas-Sierra, Chelo. (2023). Metáforas de la menopausia en el discurso biomédico en inglés y español: de «obsolescencia programada» a «baile de hormonas». In Proceedings of the 2nd International Congress: Humanities and Knowledge (pp. 41-41). Editorial Octaedro.
- Wade, Jennifer, Pletsch, Patricia K., Morgan, Susan W., & Menting, Susan A. (2000). Hysterectomy: what do women need and want to know? *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 29(1), 33-42.
- Williams, Rhonda D., & Clark, Ann J. (2000). A qualitative study of women's hysterectomy experience. *Journal of Women's Health & Gender-Based Medicine*, 9(2, Supplement 2), 15-25.
- Zhang, X. (2021). Development and critiques of conceptual metaphor theory. *Theory and Practice in Language Studies*, 11(11), 1487-1491.