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«I have ants in my pants»: Metaphorical Framing in Female's Conversational Narratives of Osteoporosis

«Siento termitas bajo la ropa»: Metaforización en las narrativas conversacionales femeninas sobre osteoporosis

ISABEL BALTEIRO
UNIVERSITY OF ALICANTE, SPAIN[1]
https://orcid.org/0000-0002-9771-5883

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ABSTRACT: Some changes that humans undergo in their bodies as they grow older are accompanied by a decline in health. Exclusively from the patients' perspective, this paper is based on narratives of lived experiences related to osteoporosis, one chronic disease that usually develops unnoticedly as age increases and that is more frequent in females than in males. The general aim is to delve into the linguistic expressions used by women suffering from osteoporosis to talk about their condition. More specifically, the study focuses on the metaphors that patients use to describe or share their real insights and experiences with the disease and how these contribute to project an image of women themselves, on the one hand, but also to provide peers with further information and support, help them improve their lives and understand the inherent complex changes, symptoms and difficulties that they, their bodies and bones (may) experiment, on the other. To fulfil these purposes, a sample of conversational voluntarily produced narratives of women diagnosed with osteoporosis has been compiled, where metaphors have been identified and analysed following the cognitive metaphor theory. The results reveal an alternance of positive empowering and negative metaphors, where women face the suffering and complexities of

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the disease, but they present and see themselves as brave and empowered patients with dreams and non-stigmatised lives.

Key words: osteoporosis, health communication, conversational narratives, metaphorical framing, patients, females.

RESUMEN: Algunos de los cambios que los seres humanos experimentan en sus cuerpos a medida que envejecen van acompañados de un deterioro de su salud. Desde la perspectiva de los pacientes, este artículo se basa en narrativas de experiencias vividas con la osteoporosis, una enfermedad crónica que suele desarrollarse de manera inadvertida a medida que aumenta la edad y que es más frecuente en mujeres que en hombres. El estudio profundiza en las expresiones lingüísticas que utilizan pacientes mujeres para hablar de esta (su) enfermedad. En concreto, el estudio se centra en las metáforas que las pacientes utilizan para describir o compartir sus conocimientos y experiencias reales con la enfermedad y cómo estos contribuyen a proyectar una imagen de las propias mujeres, por un lado, pero también a proporcionar a sus pares (otras pacientes) más información, apoyarlas, ayudarlas a mejorar sus vidas y comprender los complejos cambios, síntomas y dificultades inherentes que tanto ellas como sus cuerpos y sus huesos pueden experimentar. Para cumplir con estos objetivos, se ha recopilado una muestra de narrativas conversacionales producidas voluntariamente de y por mujeres diagnosticadas con osteoporosis, donde se han identificado y analizado metáforas siguiendo la teoría de la metáfora cognitiva. Los resultados revelan una alternancia de metáforas positivas y negativas, donde las mujeres (se) enfrentan (a) el sufrimiento y las complejidades de la enfermedad, pero también son pacientes valientes y empoderadas, con sueños y vidas no estigmatizadas.

Palabras clave: osteoporosis, comunicación médica, narraciones conversacionales, metaforización, pacientes, mujeres.

1. INTRODUCTION

Health communication, where a major component is the manner language shapes «the ways in which matters pertaining to health and illness are experienced and understood by society» (Baker et al., 2020: 1), has received increasing attention in the last decades. Studies like Demjén (2016), Baker et al. (2019, 2020), Bailey et al. (2021), or Brookes and Hunt (2021) have focused on linguistic features used in communicating medical concerns, where emphasis has been on metaphorical expressions used to describe or refer to illnesses, the suffering, experiences and other related issues, either by patients or doctors. Metaphors are considered relevant and common linguistic devices when discussing health issues: they help to improve our understanding of complex concepts and conditions, by establishing connections between concepts and also explain thoughts and emotions.

Metaphor, besides a stylistic device, is a cognitive mechanism that allows individuals to express, understand and reason about (usually) complex experiences in terms of simpler or better-known ones (Lakoff and Johnson, 1980, 1999; Potts and Semino, 2019). Following Gibbs (2008) and Lakoff and Johnson (1980, 1999), it may be said that metaphors make abstract and complex experiences more imaginable, comprehensible and easier to communicate to others by relating an abstract, complex, or simply unfamiliar concept or notion (the so-called «target domain» in linguistic terms) to another that is perceived as more concrete, simpler, or familiar (the so-called «source domain»). Apart from cognitively simplifying mechanisms (see Black, 1962; Hesse, 1963; Ortony, 1975; Giora, 2003; Steen, 2008, 2011; Burgers, Konijn and Steen, 2016), metaphors are also framing devices that allow speakers to provide their personal views by highlighting specific aspects of a concept or notion, an experience, a disease, etc. (Charteris-Black, 2005; Lakoff, 2008; Ritchie, 2013). This use, which constitutes a focal point of the present study, has received comparatively scarce attention in medical communication, but for some studies such as, for example, those by Casarett et al. (2010), Naik et al. (2011), or Demjén et al. (2016).

Osteoporosis, an asymptomatic and debilitating chronic disease of the bone, which may develop without any warning symptoms for years, is often metaphorically referred to as «the silent thief», as it literally steals bone mass without any sign of it, usually until a fracture occurs. Suffering osteoporosis involves deterioration of bone structure and strength, leading to an increased risk of fractures, mainly in the hip, humerus, wrist, spine or even shoulder, due to bone mineral loss, which occur easily and often spontaneously when doing simple activities such as bending, reaching or even sneezing or coughing. However, as an «undeclared» condition it is difficult to be diagnosed. Screening is the only means to detect and diagnose it, allowing subsequent care to avoid devastating consequences such as (spontaneous) fractures, hospitalization, surgery, walking with assistance after surgery for the rest of the patient's life, long-term nursing home care, limited independence and life quality, or even death.

This tacit, hidden and complex nature of osteoporosis as well as the permeating and prevalent use of metaphors in either health, women and/or self-experience speech lead us to hypothesize that metaphorical expressions may be ubiquitous and pervasive in discourses on and of osteoporosis. In this way, metaphors may contribute to either concreteness and simplicity or, on the contrary, a more detailed picture of the condition and its complex and hidden matters. Accordingly, as shall be seen below, this paper attempts to corroborate such a hypothesis, by exclusively focusing on female patients' «conversational narratives» (in Wolfson's terms, 1976), since, osteoporosis being apparently more prevalent in women[2], their stories gain both quantitative and qualitative importance for compilation and analysis.

2. LITERATURE REVIEW

2.1. METAPHORS, ILLNESS AND HEALTH NARRATIVES

Scholars generally acknowledge that metaphors are the cognitive and linguistic tools for communication about suffering and for personal transformation in coping with illness (Mallinson, Kielhoftner, and Mattingly, 1996; Guinjoan and Ross, 1999). Gibbs and Franks (2002: 142), however, specify that «metaphor is not a special tool for talking about illness». As they argue, metaphor is ubiquitous in all aspects of language and

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[2] While one in two women over the age of 50 is likely to experience an osteoporotic fracture, only one in five males will experience it (the National Society for Osteoporosis, June 2017).

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thought and embodied in our daily experiences (Potts and Semino, 2019). Still, and probably for this reason, metaphor is everywhere and, hence, also present in narratives of illness, where patients view their illnesses metaphorically in ways that are unique to their individual experience and background (Low, 1996).

Metaphors contribute to explaining illness, but, through their framing function, they often also contain some «evaluative potential» which allows individuals to express some kind of evaluation, facilitate particular understandings, express and share emotions or even persuade others as regards the way of dealing with both the condition and the associated stigmas (on stigmatization see, for example, Atanasova and Kokeyko, 2020). Furthermore, Semino et al. (2018) also mention other functions intrinsic to metaphor in health communication: agency and empowerment. Thus, empowerment and disempowerment consist in «an increase or decrease in the degree of agency that patients have, or perceive themselves to have, as manifest in the metaphors and their co-text» (Semino et al., 2018: 637).

In general, doctors and patients' use of metaphors is said to bridge communicative gaps and facilitate the understanding of cryptic concepts (Knight, 2003). Deliberate metaphors (Steen, 2008), in particular, are powerful and most relevant as far as they may contribute to reorganize incorrect knowledge and erroneous interpretations of symptoms, etc. Metaphors are useful to structure and organize the arguments of a message and, hence, they have both an argumentative and an educative role in patient-provider interaction (Bigi, 2014), although metaphors are not exempt of «potential dangers», as Ortony (1975: 51) suggests, «associated with the presuppositions underlying the use of any particular metaphor».

Metaphors in patients' language is one of the most commonly-used linguistic and creative devices that patients employ to describe their symptoms (see Ricci, 2022), but also to convey complex thoughts, feelings and emotions, and explain the impact of their illness on their psychological well-being. Patients' metaphor choices disclose particular ways of thinking and understanding a health or medical condition by highlighting some aspects that the speaker considers most relevant. Though many metaphors are shared by different patients and doctors, they can be differently interpreted depending on individual experience, attitude and conceptualization of the situation, as explained below. As Semino et al. (2017) show, fight and journey metaphors, for example, may be empowering or disempowering.

Numerous scholars have attended to metaphors in illness narratives from different perspectives. While some studies have focused on the general metaphorical representation of specific diseases and how this created image has affected people's perceptions and attitudes of those diseases (e.g. Hanne and Hawken, 2007), most works have examined metaphors in patient-provider communication, with different results. Some of those studies concluded that metaphors empower patients (Appleton and Flynn, 2014) and contribute to the understanding of illness(-related) information, whereas others have criticized the role of metaphors (Sontag, 1977) in patients' wellbeing and for their presentation of patients as victims (Rojas and Fernández, 2015; Reisfield and Wilson, 2004). Apart from those, extensive research may be found on patients' metaphor uses to describe multiple and complex diseases, their symptoms, emotions, etc., such as cancer, motor neuron disease, diabetes, infertility, pregnancy loss, dementia, or Alzheimer, amongst others (see, for example, Gibbs and Franks, 2002; Palmer-Wackerly, and Krieger, 2015; Youngson et al., 2015; Zimmermann, 2017; Castaño, 2020).

In spite of the above, scarce attention and little or non-empirical work have been devoted to the linguistic analysis of osteoporosis narratives and, particularly, to metaphorical expressions in women's natural conversational narratives.

2.2. WOMEN AND HEALTH COMMUNICATION: THE ROLE OF NARRATIVES

Personal illness narratives in its varied forms constitute an already acknowledged genre in the field of (health) communication, in which patients represent and recount their experiences of sickness, fulfilling a double purpose: they are told to be shared and made accessible to others' benefits, but they may also serve to humanize the patients' own experience and to empower themselves.

Women are «a special population of patients with regard to communication issues» (Weisman and Teitelbaum, 1989: 184; see also Street, 2002), not only in patient-physician interactions but also as agents of communication, as producers of, for example, conversational narrations relating their lived personal experiences, an aspect or perspective that has been scarcely explored in the literature.

Attention to female language and their narrative discourses based on their lived experiences is scholarly, linguistically, socially and medically justified: first, in general, it is often agreed that female skills in communication also permeate into health communication. Second, women patients or addressees, probably and easily persuasively influenced, are said to consume more health services than men and, hence, they will (apparently) greatly benefit from peers' (skilfully narrated) experiences (see Weisman & Teitelbaum 1989). As agents or narrators and also as a consequence of their greater exposure to the health care system, females may have higher levels of knowledge about health issues and also better skills at health communication, that is, at recognizing and reporting symptoms (see Nathanson, 1977) and, hence, it is important to analyse how they linguistically transmit these. Third, while scholarly attention has mainly been paid to patient-physician (verbal and non-verbal) interactions (Fisher, 1988; Beck et al. 2013), women's narratives are relevant for several reasons: their fully and (apparently) non-biased informational/educational content (Ortony, 1975), their self-healing/own-healing function, and also for being a linguistically rich source and a reflection of women's empowerment and assertion of their self[3] concept. As Bock states, «[women's] personal narratives shared in contexts of illness in particular, speaking (or writing) from experience provides individuals a way to contest potential stigmas attached to their illness and assert identities beyond that of their sick bodies» (2013: 152) and «validate the experience of illness» (Couser, 1997: 293).

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[3] Feminist criticism of women's health care has defined interactions between women patients and their physicians (predominantly male) as a source of problems (related to female's resentment or dissatisfaction, inappropriate care, etc.), which arise from the providers' «talking down» to the patient, belittling their capacity to use medical information rationally, or withholding technical information (see Ruzek, 1979; or Fisher, 1988). On the contrary, other studies like Hall et al. (1988) and Hall and Rotter (1995) report that physicians are cognitively, affectively and informationally more engaged with their female patients than with their male counterparts. In line with this, O'Brien et al. (2005: 504–514) indicate that men are reluctant to talk about health concerns and health behaviour ant that in health matters they often rely on females, who assist men in interpreting symptoms and encourage them to seek help.

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2.3. WOMEN AND METAPHORS

Femininity and female roles are associated with the ability to experience, express and communicate emotions to others, and to empathize with others' feelings (Fischer and Manstead, 2000), where metaphor appears as a significant feature to talk about their experiences. Metaphors not only contribute to the understanding and explanation of concepts, experiences and emotions, but in general, and particularly in women's narratives, they serve to challenge and/or sustain power relations (as explained by Chilton, 1996; Charteris-Black, 2004; or Goatly, 2007) due to their persuasive and argumentative functions and power. Female patients may use metaphors to overcome general and particular stigmas attributed to women's specific illnesses. Therefore, metaphors in women health narratives may serve as conceptual tools to either perpetuate stigmas or cultural constructions related to women, their health and diseases, or rather, to challenge these and contribute to the establishment of new destigmatized and humanized ideas, notions and concepts of specific women's health-related issues, as well as to peers and doctors' understanding of given health-related conditions.

Individuals may respond differently to illness complexities and conditions, and so they may verbalise them in divergent ways by linguistically selecting different, varied and sometimes even contradictory terms to reflect those also conflicting subjective emotions, depending on personally or socially constructed experiences, models or resources. As Charteris-Black and Seale (2009) suggest, a major issue has been the extent to which there is linguistic evidence for metaphorical conceptualisations that correspond with the physiological effects of emotion. Cognitive linguists find evidence in the verbalization of emotion with verbs and nouns that express the motion of liquids within the body, the container (see Goatly, 2007). It seems that different cultures but also different individuals may express the same emotion in quite different ways. Apparently, as Charteris-Black and Seale (2009: 102) maintain, while men tend to show difficulties in expressing their feelings by employing metaphoric expressions based on the concept of a liquid under pressure within a container, women find the direct verbal expression of feelings through metaphor easier. The explanation may be that «men involved with an illness condition (especially young males) were overwhelmed by a conflict between social constructions for the performance of masculinity and a health situation which made them singularly ill-equipped to deal with the intense physiology of their emotions» (Charteris-Black and Seale, 2009: 102). However, as these authors suggest, illness should be treated as «something that is a human experience rather than one that is gendered» (Charteris-Black and Seale, 2009: 106), though obviously different individuals and genders may react to them dissimilarly, depending on their unique circumstances and experiences.

Metaphor in gender and language research has been largely explored as a means of maintaining women's inferior position in society, the corporate world and in certain community groups (see Hines, 1999; Koller, 2004; Holmgreen, 2006), while metaphors in women's health communication, and particularly in their self-narratives has been scarcely examined (e.g. Gibbs and Franks, 2002; Barnett, 2006). As aforementioned, this study aims at filling this gap by identifying how women with osteoporosis metaphorically verbalise their condition, experiences and emotions and the self-image that these produce.

3. METAPHORIZATION IN WOMEN'S CONVERSATIONAL NARRATIVES OF OSTEOPOROSIS AS A CHRONIC DISEASE

As seen above, medical discourse or health language «has always been shot through with metaphors» (Launer, 2022: 811). Accordingly, bodies are often described either as computing operating systems or machines that may «break down» or be «mended», for example. Metaphors like these reframe patients' subjective experiences and emotions, as is the case with osteoporosis or the chronic «silent disease» which, as explained, involves complex experiences, such as fractures, chronic pain, body deformity, etc., but also has other physical or emotional consequences, shared with other chronic diseases (see Radley, 1993; Häggstrom et al., 1994; Gwyn, 1999; Bigi, 2016).

If linguistic studies on osteoporosis are rare, more exceptional and almost inexistent are those devoted to metaphors and particularly in women's oral narratives. To the best of our knowledge, apart from Hansen et al.'s (2017) study of women's narratives on learning to live with osteoporosis, only Volkman and Parrott's (2012: 432) study on women's expressions of emotions in osteoporosis narratives is worth mentioning. The authors focus on the clustering of positive or negative emotions in those narratives of osteoporosis. On the one hand, these often express negative emotions (e.g. anger, sadness, and fear) as part of the diagnosis or pain associated with having the disease, while, on the other, they are also positive by expressing hope for a better future, relief after a diagnosis or an effective treatment, and happiness for working to gain bone health. Volkman and Parrott conclude that if narrative correlate positive expressions with core themes of osteoporosis, readers will benefit from such positive views. In line with this, the present study hypothesises that the data used, based on women's shared experiences of osteoporosis in conversational real narratives also alternate positive and negative metaphors depending on the situation or condition reported at a given moment and its context. No study to date has analysed these types of narratives from a metaphorical perspective.

3.1. OBJECTIVES AND METHODOLOGY

The present study aims to analyse the metaphorical expressions that females diagnosed with osteoporosis use to describe their lived experience of the disease, paying especial attention to those metaphors that help them to frame and communicate the impact of illness on their image, potential empowerment and stigmas.

Data for this study have been conveniently compiled from patients' personal oral narratives of osteoporosis that were voluntarily and orally produced and submitted to be published, be easily accessible and publicly available online on the section entitled «Feelings and thoughts about life and body image with osteoporosis» at the Healthtalk webpage (https://healthtalk.org; https://healthtalk.org/introduction/osteoporosis).

The sample includes osteoporosis orally-told stories from 23 women, which amount to a total of 54,123 words. Only personal conversational narratives told in English by British women diagnosed with osteoporosis and who focused on their personal experiences of living with this disease for some years after diagnosis were selected. These oral narratives are linguistically free, naturally fluent and not biased, changed or corrected by any means, so that they provide not only real insights and feelings concerning the patients' experience with osteoporosis but also actual lexico-semantic selections and

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decisions made at the spur of the moment, as women talk about their feelings, emotions, sufferings, or even about their own views of themselves, the disease, the treatment, the 'healing' process, etc. Furthermore, it is important to underline that at times women were prompted simply to elicit additional information on their illness or to help the person continue with her story, but these prompts were not directed to promote the use of metaphors, as this was far from an objective; their purpose was purely informative, mainly for peers' support. Peers or other people suffering from the same disease are the expected audience of these narratives, although, other people interested on knowing more about osteoporosis or even doctors may also benefit from these experiences.

In order to fulfil the objectives of the present paper and provide a descriptive qualitative analysis of the metaphorical expressions found in the sample (of women's oral narratives on osteoporosis), the stories were first compiled[4] and then simultaneously read and annotated for lexico-semantic identification purposes and analysis, respectively. The widely accepted Pragglejaz Group's (2007) Metaphor Identification Procedure (MIP), together with Steen et al. (2010) and also Cameron and Maslen (2010) were followed for a careful and detailed metaphor identification and analysis, as no prior lists of either potential domains or potentially most salient metaphorical expressions have been used.

3.2. ANALYSIS AND DISCUSSION OF RESULTS

Over 350 different metaphors were identified; these are specifically associated to osteoporosis and intimately related issues and agents (instances of figurative language not related to osteoporosis were disregarded). Due to paper extension limits, not all the metaphors can be addressed here. However, a selection of the so-considered most relevant ones is provided. Relevancy has been measured by their referring to one of the most important general aspects of the disease (osteoporosis itself, diagnosis, pain, patients, treatment, etc.) and, secondly, also by the novelty of the metaphor or its purpose. The metaphors clearly show how women perceive their experience with osteoporosis and their feelings towards it. Some of the female narrators show their awareness of the importance of language by using metaphors referring to words themselves:

- The pain I can, I can't **put it into words**.
- Now appearance. If you are misshapen as I am. I've got the Kyphosis of the back, the hump back to put it in blunt words_and may I say here and now I did not know that was coming. how I feel.

3.2.1. Metaphors on the disease itself

The disease is presented as something real and tangible, OSTEOPOROSIS IS A HUMAN BEING with whom, though silent, women meet, face, fight and «take seriously»:

- My first **encounter** with osteoporosis was when my sister Kathy, who is the oldest in the family, broke her ankle and that was about a fall or any kind of accident.

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[4] The transcription of some of the narrations were already available at the time of compilation, while others had to be transcribed for the purposes of the present study.

- Spoiler – that is why osteoporosis is called **the silent disease** – you don't feel or see your bones getting weaker.

Even more, OSTEOPOROSIS IS A PERSON OR EVEN A STATEMENT «to be taken seriously»:

- I am passionate about advocating awareness of osteoporosis and encouraging women and men to **take osteoporosis seriously.**

The disease appears then as a major issue or challenge, OSTEOPOROSIS IS A TERRITORY (container metaphor), to be crossed and conquered (as we shall see below):

- My primary care provider dutifully scheduled a DEXA every two years. I **crossed over into osteoporosis territory** in 2017.

Patients, in fact, travel through it and in it. ***Metaphors of journeying*** are common in the sample, as OSTEOPOROSIS IS A (LONG) JOURNEY, full of difficulties,

- My story is one of pain and fracture. And that's why I'm telling it, because I don't want anyone else to **go through** this.

but also one of personal learning or growth and hope:

- My Husband and I Are on the **Osteoporosis Journey** Together
- **My personal journey** and professional practice also **showed me** how myself and others could indeed change their bone mass and muscle strength, and could reap the rewards of a full and active lifestyle.
- And I am also content that **this learning journey** has given me the tools to prevent further bone loss.
- A year after that previous DXA, I had another scan; my bone mineral density has improved, and I feel I'm **on the right track**!
- Reflecting on **my journey** over the last six years, I realized that it wasn't my doctor's fault that she didn't give me a baseline DXA screening.

These metaphors show patients' empowerment, where they even may and want to be taken as an example for others, precisely one of the purposes of the analysed narratives:

- **A Road** to Helping Others: **My Journey** Through Osteoporosis

It is a journey where taking the right steps is more than necessary, so that patients' health may be improved:

- The good news is that whatever your age, you can **take simple steps** to maintain or improve your bone health […].

Furthermore, DISEASES ARE BUSINESS, where women are empowered and have control or regulation over problems related to the disease. This metaphor is commonly used in the context of chronic diseases, where the goal is to keep the symptoms under control and prevent them from worsening. Examples of this in the sample are:

- […] we're both armed with knowledge and optimism that we can **manage** our bone health into the future!
- Finally, I now accept that this is a lifelong condition that **must be managed**.
- Osteoporosis is a **manageable** but chronic disease.

The study also reveals the patients' use of metaphors to express their positive self-transformation, where DISEASE IS A GIFT, because the alarms make patients' wake up and react, and therefore DISEASE IS RENEWAL:

- Personally, when I found out about my osteoporosis **it made me review my life**.

Within this process of empowerment, women are determined and motivated to maintain their independence and mobility, so OSTEOPOROSIS IS MADE VISIBLE and patients are willing to enjoy life:

- So **I've spread my wings** from 1964, right through to 2020.
- In fact, I'm **ready to rock**. I talk about osteoporosis because people ask me how my health is in general. So I actually tell them that I have osteoporosis and that's when other people talk to me and say they've got osteoporosis. So it's a great talking point. It's **out in the open**.

3.2.2. Metaphors on the diagnosis

The first step in the journey that osteoporosis patients live and experience is diagnosis. Interestingly, the journey does not start with the disease, which might be stigmatizing and disempowering, but with the diagnosis, seen as the moment where the patient acquires an active, managing role:

- A proper diagnosis is **the first step** to understanding what is happening to the body.

At the very beginning, DIAGNOSIS IS A NATURAL CATASTROPHE, an earthquake. As such, it is described through physical destruction metaphors, which represent the great impact of an osteoporosis diagnosis on patients' emotional health, on the one hand:

- So, my shock at the news was **seismic**.
- **My Bones, My Life: How I'm Taking Charge of My Health After a Devastating Diagnosis**
- At age 53, I was diagnosed with severe osteoporosis. I was completely blindsided and **devastated** with this diagnosis as it was not on my radar of health issues to be concerned about.

But, on the other hand, metaphorically speaking, the diagnosis itself also affects patients' physically. Thus, SEEING IS UNDERSTANDING (THE DIAGNOSIS):

- At age 53, I was diagnosed with severe osteoporosis. I was completely **blindsided** and devastated with this diagnosis as it was not on my radar of health issues to be concerned about.
- When a medical education company asked me to write an evidence-based paper on exercise for osteoporosis, I delved into the research, which **opened my eyes** to insights and info that I'd otherwise **have been blind** to.
- I felt **blindsided** and confused.
- There are many of us who have felt **blindsided** by an osteoporosis diagnosis at ages younger than we thought possible.
- And together, on a regular basis, we are just **keep an eye on** my medication, on my bone density.

Stereotyped metaphors, namely ***impact metaphors,*** are also frequently found in women's stories, where DIAGNOSIS IS A SHOCK, both mentally and physically (it [diagnosis] «hits» or «knocks» you), as below:

- And it really **impacts on** the quality of one's life.
- it has a **massive impact on** yourself and your family because you can't do normal tasks.
- After the **shock** of the diagnosis and anger about the lack of prevention wore off, I had to do something – fast, I thought.
- Life does not stop with. With the diagnosis of osteoporosis, it can be **shocking**, but I think the most important thing is to reach out to the people who understand bone health and bone disease and to work out what you need, because it's highly personal.
- Clare said that losing an inch in height **shocked** her more than the diagnosis itself.
- Whereas when you are fit you take it all for granted. When this comes it has a **hard knock effect**. And I just felt that my life was really finished. So, this probably went on for three months.
- There is no time to waste. You don't expect **to get hit with** sort of things like osteoporosis and this that and the other.

Related to these, two other metaphors are used to describe acceptance of the disease: TRUTH IS AN EDIBLE PIECE OF FOOD, INFORMATION IS FOOD, AND EATING IS UNDERSTANDING. They refer to the fact that truth sometimes is biased and difficult to understand so that and, after a shocking diagnosis, women need time to assimilate their complex and painful condition:

- Whether I'm saying this right or not, **you'll have to pick the bones out of that**. But that's the way it was explained to me.

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- I think, if, yes, I think when you first get diagnosed **you need time to digest this information** and to go off and to start living with it, and assimilating all the information, [...].

However, patients still feel positive and consider that being diagnosed with osteoporosis does not really threaten their lives and it is not a death sentence. Thus, there seems to be a progression from the initial shock and devastating news to an acceptance of the diagnosis, which does not necessarily and immediately imply death. On the contrary, while BAD NEWS IS APOCALIPTIC, women undergoing osteoporosis become positive, and are encouraged and empowered towards it (something we can also appreciate in the «digesting» scenarios of diagnosis, as will be seen below):

- And the person that gave me the information, they were very positive, encouraging. And I was made to realise that **it wasn’t the end of the world**.
- **Life does not stop with** the diagnosis of osteoporosis, it can be shocking, but I think the most important thing is to reach out to the people who understand bone health and bone disease and to work out what you need, because it's highly personal.

Instead, they know they must learn to live with it as soon as possible; time being a most valuable tool (TIME IS MONEY) to overcome difficulties inherent to the disease:

- There is no time to waste.

3.2.3. Metaphors on symptoms

As seen so far, the disease is often described using negative metaphors; however, women also describe osteoporosis and its related matters with more positive and empowering metaphors prompting an active role. Accordingly, SYMPTOMS ARE ALARMS, CALLS OR RED FLAGS, that is, rather than negative, the role of symptoms turns positive as they are reminders to prioritise bone health and care of osteoporosis because there may be potential dangers or problems like fractures, etc.

- My endocrinologist/bone specialist at Johns Hopkins was **alarmed**, which **alarmed** me.
- Prior to that I was very much the mother and the wife and the, although I had a job, my focus was on the family and feeding that family, and not really feeding myself properly. So it was a, **it was a wake-up call, it was very much a wake-up call**.
- I tell this story because this injury should have been **a red flag** for a bone density test.

This metaphor may help peer patients to understand the importance of paying attention to their symptoms or warning signs and seeking medical care when necessary. Similarly, osteoporosis and some of its consequences may be reframed as an excellent opportunity for self-care, where OSTEOPOROSIS PROBLEMS ARE GIFTS as in:

- My mom's unfortunate fall, in retrospect, was actually **a gift**.

3.2.4. Metaphors on the experience of living with osteoporosis

The best way to live with the disease is learning about it and knowing how to approach it, and therefore DISEASES ARE LEARNING PROCESSES, LIVING WITH OSTEOPOROSIS IS LEARNING, especially because the medical community does not seem to be very helpful at times, when HIDING INFORMATION IS WEARING A MASK:

- The code also **masking** the admin area and like many women it was not explained to me ...

Consequently, DOUBTS ON THE DISEASE ARE A PLAGUE, indicating the lack of understanding, knowledge, power and weakness that patients feel when diagnosed:

- But I was **plagued by doubts** about whether and how to live an active life.

However, LEARNING IS A LIQUID MEDIUM that positively contributes to patients' empowerment, to such an extent that KNOWLEDGE IS LIGHT, KNOWLEDGE IS A TOOL, KNOWLEDGE IS BEING UP, KNOWLEDGE IS BEING IN CONTROL and, hence, it is very valuable (KNOWLEDGE IS MONEY):

- Once I was diagnosed, I **plunged into learning**, much more about osteoporosis and now feel I'm **equipped with** the knowledge I need **to stay on top of this**.
- My experience also **shed light** on the nuances of the disease that generally are not publicly spoken of and offered great hope to myself and others.
- I've found the Bone Health and Osteoporosis Foundation (BHOF) to be a great source of information and I participate in one of the BHOF online support groups that has **enriched my knowledge** of osteoporosis and brought me into contact with some amazing women and men who also have osteoporosis.

3.2.5. Metaphors on pain and suffering

Although, as just explained, KNOWLEDGE IS VALUABLE, but this does not prevent women's bodies and bones being affected. Besides, there is no possibility of avoiding the suffering or pain that the illness involves. This is why the stereotypes of pain and suffering are visibly present in women's narratives, where PAIN IS A TORTURE or even PAIN IS AN ANNOYING ANIMAL:

- So one morning I woke up and I was in **excruciating** pain, and with a newborn baby and also a toddler, I just had to continue on with life.
- And I have to keep readjusting myself. I must look as though I've **got ants in my pants**, people who don't know what the trouble is.

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A great variety of metaphors depicting the consequences of suffering have also been identified: (PHYSICAL AND MENTAL) SUFFERING IS BEING DOWN, SUFFERING IS DEATH, SUFFERING IS LACK OF FREEDOM, a dehumanizing force:

- I initially **mourned** the loss of '**freedom'** to move my body as I wished.
- Someone found they had neck problems, they had long hair like me, looked in the mirror one day and they were absolutely staggered to find out that their neck had gone over and it looked so deformed.
- So yeah I mean obviously if you're under active thyroid **you feel very sluggish**, don't you? Weary. So yeah I feel a lot better since then. So she agreed to put me on that.
- Well, I've met one or two like that and they're usually very depressed, very down in the dumps and I, I mean, I say to them, 'Well I've got it. I've had it now all these years and I'm coping.' But that's not the way you can deal with it and that.
- She was bedridden and unable to do anything and says that she slipped into a period of depression.

Likewise, our findings also show that women are conscious of the fact that they cannot escape their condition [PAIN/DISEASE IS DESTRUCTION], as above,

- I just felt so **full of pain** all the time. I don't know, I just, I felt **devastated** […].

However, women choose a positive and fighting attitude against the disease. DISEASE PROBLEMS ARE ATTACKS that patients may manage and impede:

- […] a lot of people manage to impede the onslaught of it by being diagnosed early.

3.2.6. Metaphors on patients

As part of the disempowering images, there are other metaphors that corroborate the dehumanization of women with osteoporosis: PATIENTS ARE A BURDEN, PATIENTS ARE (UNSIGHTLY) VEGETABLES:

- I do it because I think, «Right. I'm not going to go round looking like **a sack of spuds**.»

The dehumanization is so important that they talk about feeling disdain, even not being a person. However, they tell their stories so that other people may benefit from them:

- And there are on-going letters about that because I don't want other people to be **treated in that cavalier fashion** that I was treated, you know.
- Well what I meant about kind, was kind and practical. Although I had to have everything done for me nobody there made me feel that **I was any less a**

person because of this. Even when they were having to wipe my bottom and bath me. I did not, was never made to feel that I was anything but a real person. So I was impressed with that. Very impressed with it.

Patients are then «**mentally stuck**» (CONTAINER METAPHOR) and their LACK OF HEALTH IS LACK OF FREEDOM, PATIENTS ARE PRISONERS physically and emotionally:

- I initially mourned the **loss of** '**freedom**' to move my body as I wished.

However, this situation may be reversed, and stereotypes overcome:

- I wanna keep my mobility so that **I can move around my independence**, so that I can get out there and hopefully with my career, give me a few years left in this old girl yet.

Women do not surrender but they feel empowered, they overcome stigmas, fight and conquer it, which is why PATIENTS ARE CONQUERERS, FIGHTERS AND WINNERS:

- But we manage and it's a bit exciting the that's the thing. We think **we've beat it, we've won**.
- I'm well aware of that but the thing is it's not the end of the world it's the beginning of a new phase of your life and you've got to make up your mind you're going to do your best to **conquer** it.
- The idea of doing daily injections was a bit scary for me, but I decided I could **tackle** it and started on my medication journey with minimal side effects.

In line with other studies on diseases, military or violence metaphors were one of the most common and frequent domains in our sample, such as EXPERIENCE AND KNOWLEDGE ARE WEAPONS:

- **Armed with my experience** and everything I had been learning about osteoporosis, I insisted he have a DXA scan.
- […] we're both **armed with knowledge and optimism** that we can manage our bone health into the future!

Apart from those, and in spite of «the fight», women see themselves in other dehumanizing terms: PATIENTS ARE FRAGILE OBJECTS and also PATIENTS ARE NON-OPERATIONAL MACHINES whose BONES ARE COLLAPSING BUILDINGS, or BONES ARE GLASS and their BODIES ARE FAILING LIVING BEINGS:

- Mind you, I still had never fractured. But it was the sheer terrifying idea that **I could fracture**, which paralyzed me.
- I just **couldn't function**.
- But when I broke my only good wrist then **nothing of me was functioning**. It was disgusting, but they were very kind to me in the [city] hospital, very kind.

Still, more positive images of patients have also been identified. Thus, PATIENTS ARE PAINTERS,

- I **pictured** the future me with **healthy bones** and without the walker my mom needed.

But also PATIENTS ARE PLAYERS

- And **I have been juggling around** making my own things for the last twenty years.

More importantly, women have a more active role when PATIENTS ARE GUARDIANS

- I've always valued and **safeguarded** my health, making sure that I eat healthy food and get lots of my favourite exercise -- like hiking, yoga, swimming, and cycling.

Another active role shows that PATIENTS ARE DEVOURING CONSUMERS or PATIENTS ARE EATERS capable of facing osteoporosis. Then, PATIENTS ARE WILD OR FIERCE ANIMALS able to deal with complex situations:

- It, it's what you need, stimulation mentally and physically as you get older, never mind osteoporosis. But that I find I enjoy that. I feel I'm doing something worthwhile and **we can get our teeth into things**.

Patients bravely and eagerly cope with their condition, losing their previous fears and bad experiences that are left behind:

- In certain respects, my mother was fiercely independent.
- Because it was a simple fall, I wanted to shake it off and ignore it.

3.2.7. Metaphors on bones and bodies

Some of the figurative expressions identified emphasize the severity of the speaker's osteoporosis, such as her experience of significant loss and damage to her spine, which has had a major impact on her quality of life and on the total collapse of her bones or body because THE BODY IS A BUILDING:

- To discover that my whole lumbar spine had **collapsed** and had **lost up to** 70% of my vertebrae.
- They haven't said anything. They just said, «Well you know you have got osteoporosis and everything is **collapsing**.» That's all I've been told.

In order to avoid this, patients consider that BONES ARE LIVING BEINGS AND VEHICLES that carry the person and have TO BE BUILT STRONGER:

- I plan to have **these bones carry me** through the next few decades of my life.
- Pilates has helped stop **my bones from thinning** even more.
- […], my endocrinologist had a look at, you know, my case and suggested that we look at medication that can **improve my bone health** by increasing my bone density, which in turn increases **bone strength**.
- We've tried to see the positive side of doing this as a couple, and we're hopeful about **building better and stronger bones** together.

The fragile nature of the bone is also emphasized through the shattered glass metaphor, which refers to the sudden and unexpected nature of osteoporotic fractures:

- And so it's only when something like another fall happens that you start thinking, 'Oh dear'. My bones aren't very good. And certainly, this last fall that I had in France, the consultant there said, **«Your bones are just like glass.»** That was that.

Similarly, the ageing body is like a building's «outdated plumbing» (THE BODY IS AN OLD BUILDING), a humorous use which is not without its dangers, because it may result in and reinforce dehumanization, that is, it presents a completely dehumanized image of the body and, by extension, of the self:

- I had to strengthen my back muscles, pelvic floor, and core, which had been sliced and diced and rearranged like outdated **plumbing** the year before.

In spite of this, patients have an «intense relationship» with their bodies, though these, like a person may do to another, tend to «let them down» and not fulfil their obligations as agreed, THE BODY IS AN UNRELIABLE PERSON:

- And, as a former ballet dancer, I had a more **intense relationship with my body** than the average person might; so I was ANGRY.
- I resented **my body** for **letting me down** and not upholding its end of the bargain to support me and sustain me through life. And I understand the frustration and anger that many project onto their bodies, feeling that their **bodies have failed them**.

On the contrary, there are also positive figures of speech such as THE BODY IS A DREAM SUPPORTER, where DREAMS ARE PHYSICAL ENTITIES that the patient wishes to achieve:

- I hope to be around for a long time, and I want **a body to support my dreams**.

3.2.8. Metaphors on treatments

Treatments or medication are differently represented. As expected, sometimes they help, sometimes they do not. TREATMENT IS HUMAN, and women may rely on it, but it may also not be welcomed by the patients' body:

- I’m finding Bonviva **doesn’t agree with** me and I’ve now come off it.
- Well, I’ve been having **tablets,** but I don’t think they’ve really **agreed with me.**
- But I have been **relying on the supplements** and extra tablets to give me my quota of what I should have per day.

In fact, at times MEDICATION IS A DANGER, MEDICATION IS SUSPICIOUS or even AGGRESSIVE:

- And together, on a regular basis, we just **keep an eye on** my medication, on my bone density.
- Valerie said that she **‘keeps a close eye’** and tries to measure herself regularly.

3.2.9. Metaphors on recovery

Women show resilience and strength, after living and experiencing osteoporosis. Sometimes, after some advances or positive changes concerning knowledge of the disease, its symptoms, the diagnosis, the treatment, or the management of the illness, they even feel happy. Therefore, women feel empowered, free from the stereotypes, and may overcome adversity and maintain their independence and autonomy. Thus, RECOVERY/IMPROVEMENT IS UP:

- My (pardon the pun) **sit-up-straight moment** was learning how to read the DXA scan and realizing the severity of my condition.
- Instead of saying, «Oh gosh it’s wonderful to take these painkillers and **you feel on cloud 9.**»
- And I think my doctor was a bit surprised that I tried that long but I did realise how important it was to actually get my bones up.
- Well they started off with quite a low dose, […], till **they were upping and upping and upping them**.

The learning, fight, efforts and actions that women do have positive results, which make them improve their condition and feel satisfied to such an extent that RECOVERY IS MONEY

- My personal journey and professional practice also showed me how myself and others could indeed change their bone mass and muscle strength, and could **reap the rewards** of a full and active lifestyle.
- Meals on the run and diet colas to help me keep up with our busy schedules, and the occasional crash diet all **took a toll on my bones**.

As a general conclusion, we may argue that despite this humanized and empowered perspective that women show in their attitude towards osteoporosis, the negative side of the disease is also present in their dehumanizing descriptions, especially as regards physical effects but also the devastating emotional impact of the diagnosis as well as the pain and suffering that the condition involves. Accordingly, women express negative emotions (e.g. anger, sadness, and fear) after diagnosis, but they are also positive: happy when gaining bone health, relieved by treatment and hopeful for a better future.

4. CONCLUSIONS

As the examples analysed have shown, the image constructed through the patients' own narrations has proven the importance of metaphor in women suffering osteoporosis. This projected image affects the perception of the disease and the patient by others and, consequently, the social constructions, stereotypes and stigmas, which are especially relevant in «silent» and/or invisible diseases like osteoporosis.

Although women in the study are not prolific as regards novel metaphors creativity, they tend to use and share a group of conceptual and quite conventional metaphors. The most common domains are impact, journey and war metaphors, which, on the one hand, highlight the complexities and sufferings of the disease, and the power and braveness with which women patients face them, on the other. Osteoporosis is a territory which may be travelled through with some difficulty but that still allows patients to take control and do things to be happy. After the disruptive moment of diagnosis, women represent themselves as empowered and humanized individuals who do not stop dreaming of an autonomous good life, far from stigmas and stereotypes.

The sample analysed here, however, might not be taken as representative of the world-wide population suffering osteoporosis, mainly for two reasons: first, the sample is limited; second, the data only included women who voluntarily narrated their testimonies and accepted to publish their narrations. It may be the case that testimonies from women who are more reluctant to share their experiences might change the results; third, women or those who chose not to participate would have brought a different perspective to the results. Apart from a broader study, future research may explore how metaphor is used by women belonging to different age groups, socio-economic backgrounds, different types of narratives, etc. These may have different pedagogical implications, as not only different individuals may vary in their views and experiences, but different groups may provide divergent ways of approaching and undergoing the disease. These perspectives will no doubt contribute to peers' and physicians' knowledge and decisions on different matters concerning the disease and its related experiences.

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