

Pancreas: Comic Biography of an Organ

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Abstract

The comic biography of the pancreas presented in this project integrates narrative-based medicine (NBM) with graphic storytelling to explore the subjective experiences of patients with pancreatic diseases. By combining scientific and humanistic perspectives, the comic format captures the complexity of illness, illustrating not only the physical but also the emotional and social challenges faced by patients. Using in-depth interviews and an interdisciplinary approach, the project transforms personal illness stories into visually engaging narratives, promoting greater public awareness and empathetic understanding of pancreatic conditions. This method bridges the gap between medical knowledge and personal experiences, offering a more inclusive and multidimensional representation of the disease.

INTRODUCTION: WHY THE PANCREAS?

Traditionally, the narrative of illness has been dominated by the perspective of health professionals or researchers, with a voice often distant from the everyday reality of the patient. In this direction, the *narrative-based medicine* (NBM) approach has emerged in recent decades as a response to the need to give patients more space within the care pathway. NBM recognises that patients' personal stories, experiences, and perceptions of illness represent an essential element for a more complete understanding of their health status (Charon, 2006). Through storytelling, patients can express not only their physical symptoms, but also the emotional, social, and psychological dimensions that influence their well-being. The aim is to integrate these narratives into the diagnostic and therapeutic process, making the patient an active protagonist of their own care path, rather than a passive recipient of medical treatments. Numerous studies have demonstrated that listening to and incorporating patients' narratives can significantly enhance the doctor-patient relationship, improve patient satisfaction, and ultimately lead to better clinical outcomes (Bensing, 2000; Epstein & Street, 2011; Greenhalgh, 1999).

In light of this and considering that the representation and social perception of chronic and serious diseases are often shaped by stereotypes or incomplete information (Link & Phelan, 1995; Valades et al., 2024), this paper seeks to explore a more nuanced and visual narrative approach. Specifically, it investigates how comic can serve as a multifaceted tool to depict the complexity of pancreatic conditions. Indeed, as is well known, disease is not only a biological event, but also a lived experience that is intertwined with the patient's social, cultural, and psychological dynamics. This approach is supported by Williams and Etkins (2021), who explore how disease experiences are deeply intertwined with the social and cultural structures that influence patients' lives. Nettleton (2020) expands on this concept, highlighting how perceptions of illness are shaped by everyday interactions and cultural representations surrounding the patient, transforming illness into a phenomenon that is as much social as it is biological.

The project presented focuses on the creation of a comic dedicated to narrating the experiences of pancreatic disease patients and their families. This tool aims to socialise citizenship to the topic of pancreatic diseases, promoting greater awareness of the physiological-normal role of the pancreas and its dysfunctions. Indeed, despite the prevalence of these diseases, they remain largely unknown to the general public, often reduced to a single clinical category that does not adequately reflect the variety of clinical and aetiological manifestations (Figure 1).

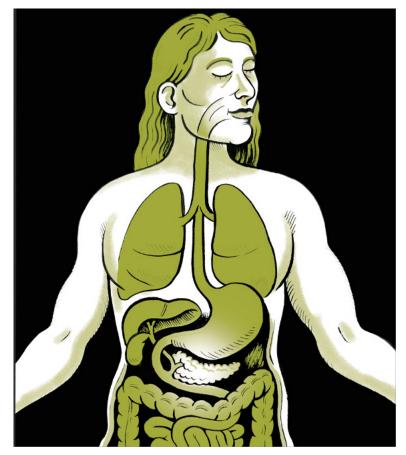


Figure 1: The Pancreas

The subjective experience of disease, particularly in pancreatic conditions, is a crucial aspect that goes beyond the mere clinical manifestation of symptoms. Pancreatic diseases, often characterised by debilitating and unpredictable symptoms (Maspero et al., 2025), force individuals to renegotiate their identity and role within society (Janda et al., 2017) This process can lead to a sense of alienation and marginalisation, aggravated by the fact that such conditions are frequently misunderstood or underestimated by both the public and medical personnel.

Patients with pancreatic diseases face a number of daily challenges that profoundly affect their quality of life (Ibrahim et al., 2024). These challenges include chronic pain, the need to manage complex dietary rules, and the emotional impact of prognostic uncertainty. According to Frank, in his work on disease narratives, patients construct 'repair stories' (Figure 2) that attempt to make sense of their suffering and restore a sense of control and continuity in their lives (Frank, 1997). However, in pancreatic conditions, these stories often clash with a medical reality that offers limited answers and an uncertain course of treatment, leading to an experience of frustration and isolation.

In addition to the difficulties of coping with the disease on a daily basis, and recalling what Goffman explained in his study on social stigmatisation (1969), some diseases that are not immediately visible or well understood can expose patients to forms of stigma, turning them into 'deviant bodies' in the eyes of society (see also Earnshaw & Quinn, 2012; Hatzenbuehler & Link, 2014). Patients with

pancreatic diseases often must justify their condition, especially when the symptoms are not clearly evident to others, or when the disease is reduced to mere stereotypes. In this context, the importance of creating alternative narratives, such as those offered by comics, becomes evident (De Stefano et al., 2023; Moretti, 2023).



Figure 2: The Interrupted Stories

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HOW COMICS ENHANCE PANCREATIC NARRATIVES

Graphic representations not only give visibility to an otherwise hidden experience, but also allow patients to articulate and share their subjective experience of illness in ways that challenge standardised and reductive representations. Through comics, it is possible to give voice to the complexity and variability of individual experiences (Czerwiec et al., 2015; Green & Myers, 2010), thus contributing to a more comprehensive and empathetic understanding of pancreatic conditions.

These assumptions are inescapably grounded in the broader approach of *Graphic Medicine* (GM), a discipline that combines visual storytelling with the field of health and medicine (Williams, 2012). GM positions itself as a compelling medium for exploring and articulating the subjective experience of illness. In the context of pancreatic diseases, GM transcends the constraints of traditional communication methods, providing a vivid and accessible platform for individuals to express their personal experiences (Maatman et al., 2022; Moretti, 2023).

Visual storytelling, such as comics, allows the complexity of illness experiences to be represented in a form that can be more immediately understandable and empathetic than clinical texts or statistics (Farinella, 2018). Through the combination of images and words, comics can capture not only the physical aspects of the disease, but also the emotional, social and psychological dimensions, creating a deeper dialogue between patient and reader (Scavarda & Moretti, 2024). This is particularly important in pancreatic conditions, where the invisible and poorly understood nature of the disease can lead to feelings of isolation and incomprehension.

GM thus offers an alternative form of storytelling that can complement the *narrative-based medicine* approach, providing a medium through which patients can tell their stories in a more engaging and personalised way. The ability of comics to illustrate the nuances of the human experience - such as chronic pain, fear of the unknown, and the daily challenges of disease management - helps build a more empathetic and multidimensional understanding of pancreatic conditions. This type of storytelling not only amplifies patients' voices, but also helps to challenge and redefine social perceptions of disease, counteracting the stereotypes and simplifications that often characterise public discussions about health (Green & Myers, 2010; Williams, 2012).

Furthermore, *graphic medicine* can facilitate a change in the way diseases are communicated and perceived, promoting greater awareness and understanding within society (Shapiro et al., 2022). This approach not only enhances the subjective experience of patients, but also serves as an educational tool, bridging the gap between specialist knowledge and the general public, making the complexity of pancreatic conditions more accessible and humanized (Lesińska-Sawicka, 2023; Masel et al., 2020).

Methods

Methodologically, this contribution is based on the collection of six illness stories through in-depth interviews with six patients suffering from different pancreatic clinical conditions. Illness stories, i.e. personal narratives of illness, are an essential tool in sociology and medicine for understanding how patients perceive and interpret their illness experiences (Bury, 1982; Charmaz, 1997; Kleinman, 1988).

The illness stories presented in this article will not only explore the normal anatomy and physiology of the pancreas but also highlight the personal experiences of several individuals facing different pancreatic conditions. These include Karl's account of acute pancreatitis, Francesco's struggle with chronic pancreatitis, and the journeys of Monica and Elisabetta through cystic tumors of the pancreas. The narrative continues with Stefano's experience with pancreatic adenocarcinoma and Paolo's battle with neuroendocrine tumors. The article will conclude with a comprehensive compendium, supported by artistic anatomical tables, to provide both medical and personal perspectives on these

conditions. The stories were collected between June and August 2023 by the team's sociologist, and the patients were recruited through the physicians involved in the project. This approach ensures that the personal experiences of patients are authentically captured, providing a solid foundation for developing new insights into the lived reality of pancreatic diseases.

These narratives have been transcribed and analysed following the principles of Grounded Theory, a qualitative research methodology that allows theories to be developed from empirical data rather than predefined hypotheses (Glaser & Strauss, 1967). Once the analysis was complete, the narratives were processed by an interdisciplinary team consisting of a sociologist, doctors, and artists (Figure 3). This team had the task of transforming the narratives into illustrated boards, a process that requires not only artistic skills but also a deep sensitivity to the nuances of the patients' personal experiences. Interdisciplinary collaboration was crucial to ensure that the visual representations were true to the narrated experiences, avoiding distortions or simplifications.

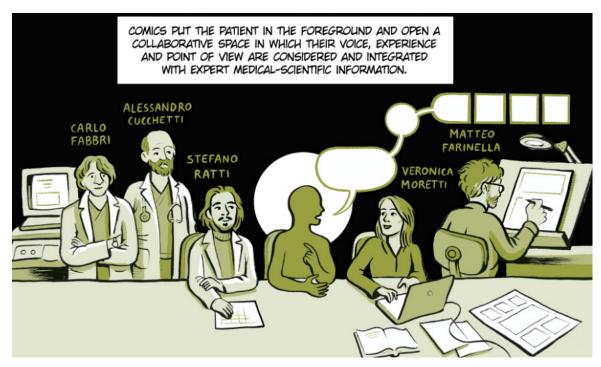


FIGURE 3: THE TEAM

In a subsequent phase, patients were actively involved in the creative process, being asked to recognise the visual representation of their illness and biography at different stages of the storyboard (Figures 4, 4.1).

This involvement included decisions on the choice of colours, the level of anonymity regarding both anatomical and personal details, and the overall message conveyed by the work. This participatory approach not only respected the authenticity of the patients' experiences, but also strengthened their sense of agency, helping to reduce the objectification often associated with the medical representation of illness (Frank, 1997). The end result comic that faithfully reflects the complexity and personality of disease stories, integrating scientific and humanistic perspectives for a more

comprehensive and empathetic understanding of pancreatic conditions (Hunter, 1991; Meuschke et al., 2022).





Figure 4.1: Storyboard

Figure 4: Storyboard

As part of the project, participants were offered the opportunity not only to share their experiences of illness through narration and visualisation in the comic, but also to leave a final message, a personal contribution representing something particularly meaningful to them. This concluding moment allowed patients to reflect further on their experience, summarising what they felt was the essence of their experience. The final messages were often full of emotion and hope, representing an opportunity for participants to express wishes, advice, or to simply to convey a thought that could remain as a kind of personal legacy in the context of the project. The authenticity of the story will be conveyed through the powerful visual channel, while respecting both narrative and artistic nuances. Thus, while words outline the contours of the illness, comics can fill these contours with evocative colours and images, offering a more complete and humanised representation of the subjects' experiences.

As pointed out by Lupton (2012), giving patients a voice and allowing them to actively contribute to narrative and creative processes is essential to promote a more ethical and inclusive approach in disease studies. The final message not only allowed participants to close their narrative journey with a gesture of self-determination, but also enriched the project with additional layers of meaning, reflecting the diversity and uniqueness of individual experiences.

This process promotes greater involvement and active participation of patients in illness narratives, redefining the boundary between different knowledge.

Ethical Consideration

The research proposal was submitted to the Bioethical Committee at Bologna University who determined that it met the criteria for exempt research according to the University involved policies and federal regulations. Participants were provided with sufficient information to make informed decisions about participation, and completion of the interview was considered consent to participate.

DISCUSSION

Preliminary reflections on the experience show that comic, often perceived as marginal or alternative art forms, offer a peculiar possibility of integrating traditional medical knowledge with patients' personal experiences. Comics, as a medium, possess the ability to combine visual and narrative elements, creating a synergy between art and medicine that can facilitate a deeper and more multifaceted understanding of disease conditions.

Paraphrasing McCloud (1993), the sequential nature of comics allows the experience of illness to be broken down and reconstructed in a form that is simultaneously visual and narrative, enabling readers to empathise with the stories told and better understand the challenges faced by patients. This mode of storytelling is particularly effective in communicating aspects of illness that may be difficult to express through text or image alone. From a sociological and anthropological perspective, the narration of illnesses through comics can be seen as a form of 'social construction of illness', a concept explored by Conrad and Barker (2010) who suggest a focus on illnesses not only as biological realities, but also as social constructions, shaped by individual experiences and cultural dynamics. Comics, in this context, offer a space where these constructions can be narrated and renegotiated, allowing patients to re-appropriate their identity as sick people in a way that is consistent with their lived experience.

In this view, the use of comics as a tool to tell illness stories represents a significant innovation in the therapeutic storytelling. However, this modality brings with it new challenges and complexities that need to be carefully considered.

First, one of the main difficulties lies in the fact that, despite the efforts to engage and the potential empathy generated by visual narratives, the oppressive environment of marginality and vulnerability, which often accompanies the experience of illness, does not simply disappear through narration or participation. As pointed out by Kleinman (1988), illness is not only a biological event, but a totalising experience involving the individual's body, mind and social context. This implies that, in the process of creating a comic narrating the illness experience, patients are not only encouraged to tell their story, but also must decide how to represent it visually. This process can amplify the emotional impact of the research on participants, exposing them to a new form of vulnerability, as they confront the visualisation of their experience in ways that could be emotionally intense or destabilising (Charon, 2006). Involvement in visual storytelling projects may entail a significant emotional burden, especially if the process requires revisiting traumatic or painful experiences. It is therefore crucial to ensure that

participants are fully aware of the implications of their involvement and that they have the option to withdraw from the project at any time without negative consequences. This raises issues of ethics of care that highlight the importance of keeping the well-being of participants at the centre of any research project (Vosman et al., 2020).

Secondly, the involvement of subjects with extremely critical clinical situations pose additional challenges, especially regarding temporal representation within visual narratives. Indeed, comic narration requires a selection and negotiation of temporal dimensions to be emphasised, a complex task when the patient's future is uncertain or, in some cases, unrealisable. This aspect ties in with the theory of the 'temporalities of illness' explored by Bury (1982), who points out how chronic illness not only disrupts the patient's daily life, but also the perception of time, creating a fracture in the continuity of life and making it problematic to imagine or plan for the future.

From a methodological point of view, the main challenge lies in ensuring that the comic narrative maintains the complexity and richness of individual experiences without oversimplifying the stories told. Reducing complex experiences to accessible visual formats can sometimes lead to a narrative that, while engaging, risks losing some of the nuances and contradictions inherent to living with a chronic or serious illness. Since the stories of illness told through comics are inevitably individual, it may be difficult to derive conclusions from them that are applicable to a broader population. This limitation is particularly problematic considering that social studies of illness often aim to identify broader trends and patterns (Bell, 2000). To address this challenge, it is essential to adopt an approach that recognises the diversity of experiences and does not attempt to homogenise or trivialise individual narratives.

Furthermore, the heterogeneity of patients and their experiences poses a significant challenge: each story is unique, and translating this uniqueness into a visual language that can be interpreted by a wider audience without losing its deeper meaning requires a special sensitivity.

Finally, we cannot ignore some inherent limitations in the choice of comics as a storytelling tool. Although comics have the ability to translate complex medical information into accessible and engaging visual and narrative stories, there remains the difficulty of generalising these individual narratives to make them representative of a collective experience. This problem is amplified when considering the cultural and social diversities that influence the way illness is experienced and told (Maturo, 2024). Therefore, while comics can act as a bridge between medical knowledge and patient experience, facilitating a more empathetic and understandable dialogue between doctors and patients, it is essential to recognise its limitations and challenges. These include managing the emotions elicited by visual storytelling, the complexity of representing time in the context of serious illness, and the difficulty of creating narratives that can resonate universally while respecting the uniqueness of individual experiences.

(IN)CONCLUSIONS

In conclusion, comics, while representing an innovative development in how the experience of illness is narrated and understood, particularly in the context of complex conditions like pancreatic diseases, is not intended to replace classical forms of NBM. On the contrary, it can become an integrative

approach that enriches and complements social studies on illness. As highlighted by Shapiro (2012) graphic form of narrative builds a deep bond between patient and physician, facilitating a more empathic and holistic understanding of the patient's health condition.

However, comic narration adds a visual dimension that can amplify and make the narrative itself even more accessible. As pointed out by Al-Jawad and Czerwiec (2019), comics can represent aspects of illness in an immediate and intuitive way that might be difficult to express solely through words. The visual component allows patients' emotions and experiences to be explored in ways that can overcome the limitations of written language, making abstract concepts such as pain, fear, isolation, and hope more visible and tangible. This does not mean that traditional storytelling loses its value, but rather that comics can offer an additional tool to understand and communicate the complexity of the human experience of illness.

From the perspective of social studies on disease, comics not only broaden the range of tools available for analysis, but also allow a wider and more diverse audience to be reached. This is especially important when considering the different linguistic and cultural competences of patients and their families, as well as the diverse backgrounds of healthcare professionals and researchers. Visual storytelling can break down language and cultural barriers, allowing for greater inclusivity and shared understanding. In this sense, comics become an essential complement to textual storytelling, not a replacement for it.

Furthermore, the integration of comics into *narrative-based medicine* may stimulate new methodological and theoretical approaches within social studies of illness. As suggested by Mol (2008), the experience of illness is complex and multidimensional, requiring equally complex tools to be adequately explored. The addition of cartoon narration enriches the analytical framework, allowing for nuances and details that might be missed in a purely verbal narrative. In this way, a more complete and multifaceted representation of the disease is offered that respects the multiplicity of individual and social experiences.

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