REVIEW ARTICLE

Compassion in health: A view of its past, present and future.

Álvaro Tala T[1,2]

ABSTRACT

Compassion is valued within the central elements of health care, existing in recent years a progressive increase in interest in its research, at least in part by the perception that it has decreased in health systems. For centuries it has been found universally in different cultures and disciplines but presenting variations according to different cultures in terms of its understanding and expression, and being its approach from scientific point of view relatively recent in history. It could be distinguished from similar concepts such as empathy, altruism and pity. Evolutionarily, it would have arisen within the framework of care and breeding behaviors of mammals, and neurobiologically it would be related to changes at autonomic activation levels, neurotransmitters, cortical and subcortical structures, similar to other prosocial emotions. It has been associated with multiple benefits in physical and mental health, and in health care. Multiple instruments have been designed to evaluate it and interventions in relation to it, which would require further studies to be able to be generalized. Barriers to compassion have also been described, and that it could be fatigued, the latter being currently under discussion. In the future there would be challenges for its development in conjunction with technology, political, sociological, clinical and educational changes, existing orientations on how to overcome them to move towards more compassionate health systems.

Key words: *Health, Empathy, Delivery of Health Care, Health Occupations, Compassion.*

Received: 05-11-2020
Accepted: 29-11-2021

This research did not have financial support.

[1] Health Sciences Education Department, Universidad de Chile, Santiago, Chile.
[2] Hospital Militar de Santiago, Santiago, Chile.

INTRODUCTION

Compassion is valued in different areas of society, such as justice, education, religion, and healthcare; and includes patients, family members, and clinicians, who would identify compassion within the central elements of healthcare[1,2]. It would be described as a need and a right for patients and their families, and as essential to the codes of ethics of healthcare professionals[3]. In recent years there has been a progressive increase in interest towards compassion research[2,4], which could be related, at least partially, to the perception that compassion has decreased in health systems around the world[5,6]. At the same time, in our country the interest towards the study and approach of compassion has increased[7], thus gaining value to review in greater detail its evolution, current status and future.

Origins of compassion

Compassion is a term that has been found in dialogues between academics, religious and philosophers over the centuries[2]. There is evidence of its universal presence in different cultures and stages of life, both in ancient Christian, Aristotelian, Confucian and Buddhist texts, as well as in modern psychology reports in countries such as Brazil, India, China, Japan, Indonesia, Malaysia, Spain and Germany; although presenting variations according to the different cultures in terms of their view and expression of it[8]. Despite this, its approach from the scientific point of view is relatively recent in history.

The word would have originated from the Latin "compati", which means "to suffer with", being more frequently defined in studies as an emotional state that arises when perceiving suffering of oneself or another, and that creates a desire to act in order to relieve that suffering. It could also be defined as a motivational cognitive element, as an attitude or a value[1,4,9]. At the same time, it has been set apart from other related concepts such as empathy, establishing that it is not an intended emotion and would not be limited to suffering, altruism, pity, or similar emotions[1], and that patients are able to perceive differences between these responses.[5]

Evolutionarily compassion would have been originated from mammals out of behaviors such as caring and raising, and it would have lasted in time due to evolution, since it enabled the development of infants, couples, communities and bonds in general[4], which would be related to greater chances of survival of a species.[1]

Current state of knowledge on compassion in healthcare

Currently there have been great advances in the field of compassion. They have been documented through the research of the multiple benefits of compassion in healthcare, being related to greater satisfaction of patients with their care, an improved process of obtaining information from them, better quality of care, greater well-being, better mental health within professionals involved in care[1,2], lower levels of anxiety, stress and depression in adolescents[10], increased immune responses, fewer hospitalizations, less use of ICUs at the end of life and better psychological adjustment to cancer diagnosis[5], lower levels of psychopathology[11] and higher levels of well-being[12], at different stages of life, including old age[13]. Compassion has even been related to reducing healthcare costs[14], reducing gaps and challenges in in this area for ethnic minorities.[15]

Discovering these benefits, and knowing that compassion has an innate component, and that it can be developed[2], has led to the design of new interventions based on this emotion, proving that it can for example reduce fear of cancer recurrences[16], improve self-regulation related to healthy behaviors[17], reduce depression[18], improve mental health and habits in university students[19], reduce stress and HbA1c in diabetics[20], show favorable results in certain areas of psychotic, depression, eating, anxious, and personality disorders related to trauma and suicidal behaviors[21,22], improve communication between health professionals and patients[23], improve the immune and behavioral response to stress[24] and reduce inflammatory markers related to early adverse events[25], among other benefits.

Despite the above, studies on interventions and psychotherapies focused on compassion have several weaknesses such as the use of small samples, heterogeneity in results, lack of active comparators, and a selection of non-clinical populations[4,26,27], which has made it difficult to generalize.

On a neurobiological level, we know that compassion is related to changes in autonomic activation through neurotransmitters such as oxytocin and vasopressin, to structures such as the frontal cortex, the anterior cingulate cortex, the medial prefrontal cortex, the insula, and the periaqueductal gray matter, and is also similarly related to the neurobiology of other prosocial emotions[8,28,29]. It is also known that not only the individual executing compassionate behaviors shows biological modifications, but the individual receiving compassion also presents epigenetic changes, especially if the interaction is in early stages of their formation, which could influence their neurological and emotional development.[4].

In order to study it properly, multiple instruments have also been designed for its measurement. They are generally assessments, and tend to measure compassion as a trait, focusing on assessing different degrees of compassion towards significant others, strangers, humanity, or oneself. For example, the Self-Compassion Scale, the Compassionate Love Scale, the Santa Clara Brief Compassion Scale, the Compassion Competence Scale, highlighting Compassionate Care Assessment Tool, the Compassion Scale, and the Schwartz Center Compassionate Care Scale are instruments designed to be applied by patients and are related to the care they have received. The Compassion Practices Scale measures the way the health institution promotes compassion. Most of the existing scales have weaknesses in terms of its validity and reliability to measure compassion in healthcare, which has led to reflect on the need to eventually adjust these instruments, create new ones and even about whether it is possible to measure compassion only through questionnaires, or if it is necessary to create instruments that also include other parameters such as observation by third parties or biological markers[1,3]. Despite the differences between them, common elements evaluated within these instruments used to measure compassion in healthcare have been identified. For example, empathy being able to recognize and act to relieve suffering, being considerate, communicating with patients, connecting and relating to them, to be professionally competent, and to tend to the patient's needs in a timely manner[30]. It should be noted that compassion tends to be studied from individuals who experiences it towards others, but it would be relevant to study it from the recipient's side as well.[4]

The fear of feeling overwhelmed by discomfort or feeling undeserving, lack of time or lack of intention to be compassionate have been found to be barriers for compassion[4]. Other healthcare limitations such as lack of staff, of resources, a mentality focused on efficiency, economy and productivity, resistance to change, a negative attitude of the staff, burnout, complex clinical situations with patients and relatives, heavy workload and possible prejudice has been identified[2]. Considering professional, patient, clinical and work environment variables, and that connecting with others to alleviate their suffering would require energy and empathy, compassion has been described as something that could eventually wear out[31]. However, this idea could be questioned, since there are no adequate instruments to measure it and it tends to promote a negative view of compassion, displaying it as something that can be avoided to save energy[5,32]. This could eventually be harmful, among other reasons, because fear of compassion has been linked to an inferior psychological functioning[33]. On the other hand, and in a significantly smaller proportion, compassion has also been described to be an energizing element, which would provide greater well-being and meaning to clinical work[6,34]. This idea is consistent with the fact that compassion can activate brain areas linked to the reward circuit and that it could reduce distress related to empathy.[35]

Future challenges for compassion in healthcare

One of the challenges that compassion in healthcare will face in the future is to become compatible with an increasingly technological society. Technology has been greatly integrated in hospitals and in medical education, generating great contributions to healthcare, but also possibly affecting patient care negatively[36,37]. It has been suggested that although technologies have allowed greater communication between people throughout the world, it could also contribute to reducing the "real contact" between them and with themselves, considering that they tend to favor sensory and thoughtless communication, hindering people's links with society and their "real" world[38]. Technological changes have meant that healthcare professionals spend more time looking at screens and less time being truly present in the interaction with their patients, which could be perceived by them as professionals being less compassionate. More than guiding to reduce the use of technologies and to promote compassion, these considerations should encourage the integration of technological processes to consider how compassion could be favored, for example, by applying the concept of digital compassion in the organization and planning of healthcare systems.[39]

Another future challenge for compassion in healthcare is somehow related to the previous one and has to do with physical contact. It has been progressively replaced and limited to its technical aspects in clinical practice, within the framework of political, regulatory, and healthcare pressures. This situation has also increased due to movements such as ·#MeToo that talks about the necessary precautions to reduce infections by COVID-19, raising fear in healthcare professionals towards physical contact related to compassion[40]. This has happened although physical contact, from holding hands to hugging, has been shown to be one of the significant elements in the expression of compassion, and is present since early childhood, and can induce neurophysiological changes related to well-being, resulting in a powerful way to relieve suffering[8]. The challenge regarding this matter, is being able to find a balance between the political, regulatory and healthcare pressures that limits the expression of physical contact as a sign of compassion and allowing it to be expressed in an appropriate form and time for a given patient in a specific context.

Finally, if we want to reflect on the future of compassion in healthcare, we should reasonably take a look at our training processes. It is known that nowadays throughout their training, students display behaviors that are not as caring, that are less empathic and compassionate. However, they perceive they do have compassionate behaviors. This situation might be connected to the lack of adequate modeling, the pressure of clinical environments having multiple roles and responsibilities, and the lack of opportunities to reflect on tasks being performed, thus emphasizing on skills based on knowledge and technique over those related to compassion[2,14]. Moreover, failure to see patients as people, the lack of opportunities and time to recognize, explore, understand and act in behalf patient´s need, a medical culture with an emphasis on knowledge, diagnosis and treatment, the lack of adequate models and ideals related to compassion could negatively influence this scenario.[41]

Even though we could probably agree that it is relevant and feasible to promote compassion in healthcare education, the next question to be answered is how to achieve this. Studies and interventions conducted in the educational and care departments have provided mixed results and are insufficiently categorical to routinely establish a methodology in training[2,42-44] and consider that compassion can be part of a wide and heterogeneous range of behaviors, from small acts such as respecting silences in a clinical interaction, holding a patient's hand at a certain moment and introducing oneself at the beginning of an appointment; to behaviors such as opening up to personal issues, understanding that the time dedicated to compassionate acts is relevant, as well as the reiteration of these actions.[2]

Certain hypotheses have mentioned that in order to effectively increase compassion in

health, it would probably be necessary to include bottom-up strategies, such as specific training in communication skills, and select compassionate professionals and design compassionate leaderships, institutions, cultures and policies[5,6,45]. In this context, there are certain guidelines that describe how compassion could be promoted effectively in training healthcare professionals[14,46,47],these is: to include compassion in the institutional mission and learning outcomes, engage students and teachers through the use of active teaching-learning methodologies, promote collaboration between them, favor student-centered learning environments, pay special attention to the development of reflective skills in students, emphasize affective and experiential learning, to use for example, reflective writing based on your experiences, reflective practices, guided community projects, reflection on humanity, group discussions around acts of compassion, simulations, and case studies. This should complemented by developing behaviors that have shown to increase patient's perception of compassion, such as sitting (vs standing) during the interview, detecting nonverbal expressions that suggest certain emotions in patients, recognizing and responding to situations that revolve around compassion and display a compassionate behavior, using non-verbal caring expressions in a timely manner, such as adjusting voice tone, maintaining eye contact and use phrases that show support (ex: "I am here for you, let's work together"), concern (eg "what worries you the most?"), acknowledgment (eg "this has been difficult for you"), eliciting the patient's perspective (eg "how has this affected your routine?"), name emotions (eg: "You look sad") and that show validation of the current experience (eg: "most people would feel like you"). If compassion assessment in educational contexts is not developed adequately, it could send a message to students that it is not a necessary skill, and that it is inferior to biomedical knowledge, or even encouraging it to be pretended rather than actually experienced.[48]

Although there have been many scientific advances regarding the approach to compassion in healthcare, we must not lose sight of the fact that compassion has been at the heart of clinical work since the very start and that it is the basis of a calling to care for others in health professions. In this sense, we should once again give it the core role it deserves and thus move towards more compassionate healthcare systems.

REFERENCES

1. Strauss C, Lever B, Gu J, Kuyken W, Baer R, Jones F, et al. What is compassion and how can we measure it ? A review of definitions and measures. Clin Psychol Rev [Internet]. 2016;47:15–27. Available from: http://dx.doi.org/10.1016/j.cpr.2016.05.004
2. Sinclair S, Norris JM, Mcconnell SJ, Chochinov HM, Hack TF, Hagen NA, et al. Compassion : a scoping review of the healthcare literature. BMC Palliat Care [Internet]. 2016;15:1–16. Available from: http://dx.doi.org/10.1186/s12904-016-0080-0
3. Sinclair S, Russell LB, Hack TF, Kondejewski J, Sawatzky R. Measuring compassion in healthcare: a comprehensive and critical review. Patient-Patient-Centered Outcomes Res. 2017;10(4):389–405.
4. Gilbert P. Explorations into the nature and function of compassion. Curr Opin Psychol [Internet]. 2019;28:108–14. Available from: https://doi.org/10.1016/j.copsyc.2018.12.002
5. Brito-pons G, Librada-flores S. Compassion in palliative care : a review. Curr Opin Support Palliat Care. 2018;12(4):472–9.
6. Zulueta PC De. Developing compassionate leadership in health care : an integrative review. J Healthc Leadersh. 2016;8:1–10.
7. Brito G, Araya-véliz C. Breve historia y estado actual de la práctica de mindfulness y compasión en Chile. Mindfulness & Compassion [Internet]. 2016;1(1):45–50. Available from: http://dx.doi.org/10.1016/j.mincom.2016.09.006
8. Goetz JL, Keltner D, Simon-Thomas E. Compassion: An Evolutionary Analysis and Empirical Review. Psychol Bull.

2010;136(3):351–74.
9. Perez-bret E, Altisent R, Rocafort J. Definition of compassion in healthcare : a systematic literature review. 2016;22(12):599–606.
10. Marsh IC, Chan SWY, Macbeth A. Self-compassion and Psychological Distress in Adolescents — a Meta-analysis. Mindfulness (N Y). 2018;9:1011–27.
11. MacBeth A, Gumley A. Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. Clin Psychol Rev. 2012;32(6):545–52.
12. Zessin U, Dickhäuser O, Garbade S. The relationship between self compassion and well being: A meta analysis. Appl Psychol Heal Well Being. 2015;7(3):340–64.
13. Jackowska M, Brown J, Ronaldson A, Steptoe A. The impact of a brief gratitude intervention on subjective well-being, biology and sleep. J Health Psychol. 2016;21(10):2207–17.
14. Patel S, Pelletier-Bui A, Smith S, Roberts MB, Kilgannon H, Trzeciak S, et al. Curricula for empathy and compassion training in medical education: A systematic review. PLoS One. 2019;14(8):e0221412.
15. Singh P, King-Shier K, Sinclair S. The colours and contours of compassion: A systematic review of the perspectives of compassion among ethnically diverse patients and healthcare providers. PLoS One. 2018;13(5):e0197261.
16. Gonzalez-hernandez E, Romero R, Campos D, Burychka D, Diego-pedro R, Baños R, et al. Cognitively-Based Compassion Training (CBCT ®) in Breast Cancer Survivors : A Randomized Clinical Trial Study. Integr Cancer Ther. 2018;17(3):684– 696.
17. Biber DD, Ellis R. The effect of self-compassion on the self-regulation of health behaviors : A systematic review. J Health Psychol. 2017;24(14):2060–71.
18. Diedrich A, Grant M, Hofmann SG, Hiller W, Berking M. Self-compassion as an emotion regulation strategy in major depressive disorder. Behav Res Ther. 2014;58:43–51.
19. Dundas I, Binder P, Hansen TGB, Stige SH. Does a short self compassion intervention for students increase healthy self regulation? A randomized control trial. Scand J Psychol. 2017;58(5):443–50.
20. Friis AM, Johnson MH, Cutfield RG, Consedine NS. Kindness matters: a randomized controlled trial of a mindful self-compassion intervention improves depression, distress, and HbA1c among patients with diabetes. Diabetes Care. 2016;39(11):1963–71.
21. Graser J, Stangier U. Compassion and loving-kindness meditation: an overview and prospects for the application in clinical samples. Harv Rev Psychiatry. 2018;26(4):201–15.
22. Kelly AC, Wisniewski L, Martin Wagar C, Hoffman E. Group based compassion focused therapy as an adjunct to outpatient treatment for eating disorders: A pilot randomized controlled trial. Clin Psychol Psychother. 2017;24(2):475–87.
23. Amutio-Kareaga A, García-Campayo J, Delgado LC, Hermosilla D, Martínez-Taboada C. Improving communication between physicians and their patients through mindfulness and compassion-based strategies: a narrative review. J Clin Med. 2017;6(3):33.
24. Pace TWW, Negi LT, Adame DD, Cole SP, Sivilli TI, Brown TD, et al. Effect of compassion meditation on neuroendocrine, innate immune and behavioral responses to psychosocial stress. Psychoneuroendocrinology. 2009;34(1):87–98.
25. Pace TWW, Negi LT, Dodson-Lavelle B, Ozawa-de Silva B, Reddy SD, Cole SP, et al. Engagement with cognitively-based compassion training is associated with reduced salivary C-reactive protein from before to after training in foster care program adolescents. Psychoneuroendocrinology. 2013;38(2):294–9.
26. Leaviss J, Uttley L. Psychotherapeutic benefits of compassion-focused therapy: An early systematic review. Psychol Med. 2015;45(5):927–45.
27. Kirby JN, Tellegen CL, Steindl SR. A meta-analysis of compassion-based interventions: Current state of knowledge and future directions. Behav Ther. 2017;48(6):778–92.
28. Hou X, Allen TA, Wei D, Huang H, Wang K, DeYoung CG, et al. Trait compassion is associated with the neural substrate of empathy. Cogn Affect Behav Neurosci. 2017;17(5):1018–27.
29. Palgi S, Klein E, Shamay-Tsoory SG. Intranasal administration of oxytocin increases compassion toward women. Soc Cogn Affect Neurosci.

2014;10(3):311–7.
30. Papadopoulos I, Ali S. Measuring compassion in nurses and other healthcare professionals: An integrative review. Nurse Educ Pract. 2016;16(1):133–9.
31. Coetzee SK, Laschinger HKS. Toward a comprehensive, theoretical model of compassion fatigue: A n integrative literature review. Nurs Health Sci. 2018;20(1):4–15.
32. Sinclair S, Raffin-Bouchal S, Venturato L, Mijovic-Kondejewski J, Smith-MacDonald L. Compassion fatigue: A meta-narrative review of the healthcare literature. Int J Nurs Stud. 2017;69:9–24.
33. Kirby JN, Day J, Sagar V. The'Flow'of compassion: A meta-analysis of the fears of compassion scales and psychological functioning. Clin Psychol Rev. 2019;70:26–39.
34. Dunn DJ. The intentionality of compassion energy. Holist Nurs Pract. 2009;23(4):222–9.
35. Klimecki OM, Leiberg S, Ricard M, Singer T. Differential pattern of functional brain plasticity after compassion and empathy training. Soc Cogn Affect Neurosci. 2013;9(6):873–9.
36. Pershing S, Fuchs VR. Restructuring medical education to meet current and future health care needs. Acad Med. 2013;88(12):1798–801.
37. Jason H. Future medical education: Preparing, priorities, possibilities. Med Teach [Internet]. 2018;0(0):1–8. Available from: https://www.tandfonline.com/doi/full/10.1080/0142159X.2018.1503412
38. Castells M. No Title. In: La era de la información: economía, sociedad y cultura. Segunda Ed. Madrid: Alianza; 1996.
39. Tala Tajmuch A. Compasión digital. Rev Med Chil [Internet]. 2020;148(8):1219–26. Available from: http://www.revistamedicadechile.cl/ojs/index.php/rmedica/article/view/8574/6168
40. Davin L, Thistlethwaite J, Bartle E, Russell K. Touch in health professional practice : a review. Clin Teach. 2019;16:1–6.
41. Krishnasamy C, Ong SY, Loo ME, Thistlethwaite J. How does medical education affect empathy and compassion in medical students ? A meta-ethnography : BEME Guide No . 57. Med Teach [Internet]. 2019;1–12. Available from: https://doi.org/10.1080/0142159X.2019.1630731
42. May C, Blomberg K, Griffiths P, Wengstro Y, Bridges J. Interventions for compassionate nursing care : A systematic review. Int J Nurs Stud. 2016;62:137–55.
43. Everson N, Levett-Jones T, Pitt V. The impact of educational interventions on the empathic concern of health professional students: a literature review. Nurse Educ Pract. 2018;31:104–11.
44. Durkin M, Gurbutt R, Carson J. Qualities, teaching, and measurement of compassion in nursing : A systematic review. Nurse Educ Today [Internet]. 2018;63(August 2017):50–8. Available from: https://doi.org/10.1016/j.nedt.2018.01.025
45. Leung YL. Towards promoting and assessing clinical compassion. Br J Hosp Med. 2013;74(12):677–81.
46. Younas A, Maddigan J. Proposing a policy framework for nursing education for fostering compassion in nursing students: A critical review. J Adv Nurs. 2019;75(8):1621–36.
47. Sinclair, S., Kondejewski, J., Jaggi, P., Dennett, L., des Ordons, A. L. R., & Hack, T. F. (2021). What is the state of compassion education? A systematic review of compassion training in health care. Academic Medicine, 96(7), 1057.
48. Wright SR, Boyd VA, Ginsburg S. The hidden curriculum of compassionate care: can assessment drive compassion?. Academic Medicine. 2019 Aug 1;94(8):1164-9.

Correspondence:
Álvaro Tala Tajmuch
Hospital Militar de Santiago, Av. Fernando Castillo Velasco 9100, Santiago, Chile.
Phone: +56223316000, +56 9 75494835.
alvarotalat@gmail.com