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Original Research

Can you be cured if the doctor disagrees? A case study of 27 prayer healing reports evaluated by a medical assessment team in the Netherlands

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ABSTRACT

The setting: between 2015 and 2020 a medical assessment team evaluated 27 reports of prayer healing in the Netherlands.
Objectives: Three research questions were formulated. What are the medical and experiential findings? Are there medically remarkable and/or unexplained healings? Which explanatory frameworks can help us understand the findings?
Methods: The reported healings were analyzed using both medical files and patient narratives, as part of a case study research design compiled by a multidisciplinary research team. An independent team of five medical consultants, representing different fields of expertise, evaluated the 27 case files. According to criteria these were selected from a larger group of 83 received reports. Experiential data was obtained by in-depth interviews and analyzed. Instances of healing could be classified as 'medically remarkable' or 'medically unexplained'. Subsequent analysis was transdisciplinary.
Results: Eleven of the 27 healings assessed were evaluated as 'medically remarkable', none were labelled as 'medically unexplained'. Recurring characteristics were common to some degree in all healings, whether 'medically remarkable' or not: a temporal connection with prayer, instantaneity and unexpectedness of healing, strong emotional and physical manifestations, and a sense of 'being overwhelmed' and transformed. The healings were invariably interpreted as acts of God. Positive effects have persisted for 5 to 33 years, with 2 relapses.
Conclusions: Our findings on remarkable healings do not fit well in the traditional biomedical conceptual framework. All healings exhibited important non-medical aspects, whether or not they were assessed as medically remarkable. We need a broader multi-perspective approach in which all relevant data is considered to be valuable, both experiential and objective. This so-called horizontal epistemology may be helpful when trying to understand the findings, and it may bring about mutual understanding between patients, health practitioners and relevant disciplines.

Introduction

Margaret had been suffering from a gradually progressive form of Multiple Sclerosis for 7 years. She was largely wheelchair bound as she could only walk 15–50 m using crutches (EDSS score 6,5). She had difficulties balancing, had chronic fatigue and cognitive symptoms. Someone in her congregation had been healed after prayer. Margaret also started to pray for healing and was planning to visit a prayer healing service. However, before she went and without any prior indication, she woke from a short sleep and noticed that all her symptoms had gone. She discovered that she was able to walk and cycle without hindrance! And her symptoms did not return.

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She went to her next appointment with the specialist neurologist by motorbike. She entered the consultation room in her motorcycle suit, helmet under her arm, instead of being in a wheelchair. According to Margaret the MS was completely gone. Another MRI scan was made, which showed the lesions to be unchanged. Her doctor said that he would therefore maintain the diagnosis of Multiple Sclerosis.

Who was right: Margaret or the doctor?

Throughout history up to this very day[1] people pray for health. Multiple reports contain details of healings from various conditions. However, most of these reports[2] are non-academic, thereby creating skepticism among scientists, medical professionals and people at large.

More recently, the relationship between prayer and healing has been investigated by conducting randomized controlled trials. A Cochrane review including 10 randomized trials with a total of 7646 patients showed inconclusive results for the effects of intercessory prayer.[3] However, such studies have considerable methodical and conceptual difficulties.[4] Background conditions are difficult to establish. Friends, family, and members of religious congregations may be praying outside the context of the study. Many find it impossible to investigate prayer as if it were a drug or a surgical procedure.[5] So, finding reproducible evidence for a relationship between prayer and healing is an ongoing journey.

In the Netherlands a case study research was designed[6] to explore the following research questions: What are the medical and experiential findings when viewing reports of prayer healing? Are there medically remarkable and/or unexplained healings? Which explanatory frameworks can help us understand the findings?

This article is about the evaluations of a medical assessment team investigating 27 individual cases, taken from a larger group of 83 individual prayer healing (HP) reports. Findings from medical files and experiential data were used. In selected cases in-depth interviews were conducted, attempting to understand the subjects and their experiences.[7] This may provide a different and richer perspective. In literature we were unable to find reports using this combined approach, although there is some overlap with studies conducted by Brown,[8] Duffin[9] and Francois et al.[10]

Methods

At the Vrije Universiteit, Amsterdam, and Amsterdam University Medical Center, location VUmc, a protocol was developed to facilitate a retrospective, case study research of prayer healing (HP) reports (ref 6). The study took place between 2015 and 2020.

Recruitment, initial assessment and selection

Any individual in the Netherlands or neighboring countries who claimed to have been healed through prayer could be included. The perception of prayer was pivotal, not the type or sort of prayer. The reports of healing came from multiple sources: articles in newspapers, other media, the research team's medical practices and their vicinities, prayer healers, medical colleagues.

Reports of HP were investigated systematically using a step-by-step method. Initially they were reviewed by the first author (DK). Upon consent medical data from before and after the prayer(s) was collected.

A case was selected for evaluation by a medical assessment team when complying with the following criteria:

- Likelihood of medical remarkability when compared to the Lambertini criteria (outlined below): it should be a well diagnosed serious disease with changes in before and after medical data.
- Completeness of medical data.
- Duration of healing to assess if a recovery is ongoing. In serious chronic diseases or malignancies preferably at least five years.
- Healings before 1990 were excluded because of difficulties in finding medical data (there was one exception in our study).

The first author would consult one of the assessment team members when in doubt as to whether to select a case or not.

Medical assessment

The independent medical assessment team consisted of five consultants (internal medicine, haemato-oncology, surgery, psychiatry, neurosurgery). Other experts were consulted when deemed necessary.

The assessment team used a standardized evaluation to determine whether a cure was 'medically unexplained' or 'medically remarkable'. 'Medically unexplained' indicates that no scientific explanation could be found at the time of assessment. The classification 'medically remarkable' refers to a healing that is surprising and unexpected in the light of current clinical and medical knowledge and that has a remarkable (temporal) relationship with prayer.

Our classification was supported by consulting the 'Lambertini criteria'.[11] These are used by medical committees at the Lourdes pilgrimage site (France) - and elsewhere within the Roman Catholic church - to determine if a cure is scientifically unexplained.[12]

With slight modifications these criteria are as follows:

- The disease has to be serious.
- The disease is known under medical classifications, and the diagnosis should be correct.
- It must be possible to verify the healing with reference to medical data, such as medical history, physical examination, further investigations.
- The cure cannot be explained by medical treatment in the past or present, nor by the natural course of the disease, such as spontaneous improvements or temporary remissions.
- The cure is unexpected and instantaneous. Although the recovery may take some time, its onset should be instantaneous and related to prayer.
- The cure is either complete or partial with substantial improvement. The individual is fully or largely returned to his or her original state of health.
- The cure is permanent.

In-depth interviews

When the assessment team considered a healing case to be 'medically remarkable' or 'unexplained' an in-depth interview was conducted by a senior researcher (EB). The objective was to gain insight into the individual's background history, perceptions of the HP experience(s) and health outcomes as well as outcomes in other spheres of life. It also allowed for comparison between medical and experiential data, especially at the moment of prayer. The approach followed a qualitative research methodology.[13] A topic list was used. The interviews were recorded and written out verbatim. Subsequently a report was made, which was verified with the participants by means of a member check. A phenomenological interpretative analysis[14] was completed by the senior researcher, and discussed in the assessment team.

The assessment team re-evaluated their initial decision based on the report and discussion.

Level of expectancy

The level of expectancy 'to be healed by prayer' (as a retrospective self-report) was divided into 4 categories: none, low, moderate or high expectancy. Scoring was carried out by the first author using written entries, interviews, conversations by phone and additional data received by post and by e-mail.

Follow-up

The HP reports were received in 2016 and 2017. Follow-up studies were carried out by one and the same research student in 2019 and 2021. As many participants as possible were interviewed to obtain actual information about the health status and the socio-religious quality of life.

Results

We received 83 reports. Twenty seven were selected for evaluation by the medical assessment team, and fourteen individuals took part in an in-depth interview. Eleven cases were considered to be 'medically remarkable'. None were evaluated as 'medically unexplained'.

Reports came through different channels and from all over the country as well as three from Belgium and one from Germany. All participants interpreted their healing as an act of God. The setting of the prayer(s) varied from personal or group prayers, to prayer healing services, prayers in a church community or during anointing of the sick, and liturgical prayers.

Healings, evaluated as medically remarkable

Details of the eleven cases classified as 'medically remarkable' are given in Table 1. Note that in cases 3,4,7,8 and 10 mismatches were found between subjective and objective data: impressive functional improvements were experienced, witnessed by others as well, while objective investigations still showed abnormalities.

All healings, whether evaluated as medically remarkable or not (n=28)

In total the assessment team evaluated 28 healings in 27 cases. Details about those healing reports not classified as medically remarkable can be found in the supplementary file. Physical and emotional manifestations were reported in almost all instances as occurring simultaneously with a healing experience, examples can be found in Table 1 and in the supplementary file. They were invariably sensed as positive. In Table 2 the occurrence of such manifestations is related to the course of the disease. Most healings had an instantaneous onset combined with manifestations at the same moment.

In this total group of 28 healings the duration of illness preceding the healing prayer ranged from 4 days to 40 years, the median being 4 years. The duration of being healed after the prayer (until 2021 or until relapse/death) varied from one to 33 years, the median being 12 years.

A relapse had occurred in 2 of the 28 healings up until 2021, one involved leukemia and the other Parkinson's disease. The healing had persisted in all other cases, some still experienced minor symptoms without influencing their physical and mental functioning. Two patients passed away due to unrelated causes, one could not be traced for follow-up as a result of emigration.

The expectation of healing was absent or low in the majority of patients. Often it came as a surprise, as shown in Fig. 1.

One intriguing aspect of our project concerned the assessment team itself. Initially members considered it their primary task to make evaluations based strictly upon medical grounds. Individual cases were discussed extensively. At a later stage the team found it increasingly difficult to differentiate between 'remarkable' and 'unremarkable'. When looking at the healings from a non-medical perspective there were surprising similarities in most of them, whether medically remarkable or not.

Discussion

In this series of 27 consecutive cases with 28 healings, the most significant finding was the remarkable similarity between the experiences accompanying the healings, including the participants' interpretations of these experiences. These similarities were not related to the context (healing service, personal or liturgical prayers) or other prayer characteristics, but rather the same set of phenomena appeared under widely varying circumstances. Another important finding was the repeated mismatch between 'subjective' and 'objective' data, which was also discussed in previous articles.[15,16] It is important to note that this study is about a subgroup of people praying for healing. All participants experienced a healing which they related to prayer and they decided to report the event. When interpreting the results we should therefore be aware of the limitation that this research group is a favorable subgroup. We realize that there may be negative experiences or downsides as well. However, it was our intention to study those with positive outcomes to examine their relevant medical data and experiences. Bearing this in mind we will now return to our research questions.

What are the medical and experiential findings?

The dominant pattern was one consisting of the following characteristics: instantaneity and unexpectedness of healing, strong physical and emotional manifestations, and a sense of 'being overwhelmed'. The healing was not experienced as a 'normal' cure, but as a transformative experience. Involving the person-as-a-whole, a healing of 'body, mind and soul'.

Additionally, follow-up yielded positive results up to four years after enrolment in the study: a large majority reported continuation of healing.

Are there any medically remarkable and/or scientifically unexplained healings?

Eleven healings were considered to be medically remarkable. Most of them referred to an unusual course of the disease. There were examples of sudden cures of serious chronic diseases in particular where the best possible prognosis would be one of gradual regression. Apart from the case of acute leukemia, none of the healing reports in patients with malignancies was considered to be medically remarkable as all of them were simultaneously receiving medical treatment. Since most patients with cancer receive some kind of treatment nowadays (surgery, chemo- or immunotherapy, hormones, radiotherapy) it is very difficult to draw conclusions about this group.

None of the healings were evaluated as unexplained. Unexplained cures were assessed elsewhere in rare instances such as in Lourdes,[17] Rome (ref 9) and by Romez et al.[18,19] At the medical desk in Lourdes less than 1% of reports received were evaluated as being unexplained (ref 10,17). It is therefore understandable not to find such cases in our small series.

Which explanatory frameworks can help us understand the findings?

As the study evolved the assessment team found it increasingly difficult to explain the observations in biomedical terms. Many of the healings which could not be assessed as medically remarkable did have remarkable non-medical aspects. The best option therefore was to conclude that there was a form of remarkableness other than medical remarkability. What else could be implied and why is it that the occurrences were unexpected in many instances? Answers to such questions are not straightforward. When searching for other than biomedical explanations, some explanatory options and strategies could be considered. Firstly, studies of the placebo effect could point to a better understanding. However, typical for the placebo effect is the significant role of expectancy,[20,21] which seemed to be absent in many of our cases. Secondly, one might refer to what is known about the role of contexts and labeling, for instance in the literature on medically unexplained symptoms.[22] However, typically these patients only recover gradually.[23] Thirdly, one might suggest that our patients suffered from a psychiatric problem, like somatization, factitious disorder or even malingering. But

Table 1
Data reflecting 11 healings, evaluated as medically remarkable: E=expectancy NE=no expectancy LE=low expectancy ME=moderate expectancy HE=high expectancy N/A=not applicable (e.g. comatose) Age = age category at moment of healing. Duration of healing = time period from healing until 2021 or until relapse/death.

Nr/Sex/ Age	Illness	Setting and duration of healing	Mani-festations	Course	E	Evaluation
1. F 35–40	Crohn's disease	Two prayer healing services (15 years)	1st service: sense of being touched in the digestive system, crying 2nd service: falling in the Spirit, sense of being lifted from the floor (levitation) and a wind in the hall	Instantaneous healing in 2 steps: partial after 1st service, full recovery after 2nd service. No relapse	LE	Disease duration of 13 years with remissions and exacerbations as is common in Crohn's. It was considered to be medically remarkable that all symptoms stopped abruptly in a temporal relationship with two prayers, and have not recurred since. A classification 'unexplained' was not given as up to 20% of patients may have prolonged remissions.
2. M 35–40	Acute leukemia complicated by fungal infections, abdominal abscesses, bowel perforation	Anointing of the sick Reformed church (one year)	Feeling of support	Unexpected remission. Relapse after one year, passed away.	NE	A terminally ill patient with therapy resistant acute leukemia was sent home. He was expected to die within a few days because of ongoing disease with fatal complications. But when at home there was complete remission. Despite a relapse, the team considered the full physical recovery, lasting one year, to be remarkable.
3. F 60–65	Multimorbidity and polyphar-macy: asthma, chronic arthritis with multiple disabilities, impaired hearing, incontinence et al	Desperate personal prayer before sleep (5 years)	Strong emotions, followed by a sensation of calm and being wrapped in a blanket	Stepwise improvement of all complaints in a few weeks. No relapse, except for re-use of hearing aids recently due to aging	NE	The use of a variety of powerful and addictive drugs (prednisone, oxygen, inhalations, hydroxychloroquine, oxycodone, tramadol, fluoxetine) was discontinued. There were no withdrawal symptoms as could be expected. Invalidity turned to self-sustainability. The combination of the above was considered to be medically remarkable. Not unexplained as audiometry and spirometry were unchanged.
4. F 50–55	Advanced, rapidly progressive Parkinson's disease	Prayer during Evangelical Easter conference (8–9 years)	Warm cloud, thick air, sensed by others nearby as well; 'tight net' removed from brain	Instantaneous improvement, 90% recovery; Partial relapse after 8–9 years	NE	Instantaneous 90% recovery: regaining full functioning from being largely wheelchair bound with cognitive symptoms and maximum oral treatment. DaT-SPECT scanning was still abnormal 3–4 years after healing. Classification was medically remarkable, not unexplained because of remaining limited symptoms and scan data.
5. F 25–30	Anorexia nervosa, lowest weight 29 kg (BMI 10)	Desperate outcry to God while non-religious (5 years)	Sense of self-acceptance and return of appetite; a bright light and wind in a closed room.	Instantaneous improvement; weight gain from 37 kg (BMI 13) to 50 kg. No relapse	NE	Sudden healing and subsequent weight gain after 8 years of severe anorexia with repeated admissions, Body Mass Index (BMI) fluctuating between 10 and 20.
6. F 20–25	Chronic one-sided herpes keratitis, low vision; failed cornea-transplant.	Prayer healing service, the pastor had a prophecy for her eye (10 years).	She saw a bright light and fell on the floor.	Immediate relief of pain and improvement of vision. Present situation unknown, no recent contact (emigration).	NE	Repeated episodes of herpetic keratitis of the right eye from the age of 4 years, resulting in chronic pain and low vision. Cornea-transplantation was done and rejected. While a second transplantation was planned, all pain and symptoms stopped at the moment of an intercessory prayer. Right sided vision doubled 0,2 > 0,4 from before and shortly after prayer.
7. M 45–50	Type B aortic dissection with severe walking impairment	Multiple prayers in Reformed church, planning to go to a healing service (18 years)	Warm hand on his back, gladness, urge to walk	Instantaneous healing, no relapse of complaints. Aneurysmatic dilatation aorta slowly growing (scans).	ME	Iatrogenic aortic dissection (type B) as complication of cardiac catheterization. Diminished blood flow leading to pain and walking impairment. The instantaneous improvement was considered to be remarkable. Not unexplained as MRIs continued to show the dissection with a double lumen (both having flow).
8. F 50–55	Multiple Sclerosis	Different prayers, was preparing for a healing service (12 years).	None	Instantaneous healing of all disabilities after an afternoon sleep. No relapse	LE	Chronic progressive course of MS for 7 years, EDSS disability score 6,5. Diagnosis was confirmed in 2 different hospitals with corresponding MRI lesions. Although very remarkable it was not labelled as unexplained since MRI lesions were unchanged.
9. F 30–35	Ulcerative colitis, psoriasis with arthritis, asthma	Prayer healing service with 3	Warmth, sensation of being held as if claws were removed from her back.	Healed from colitis, arthritis, psoriasis, but not from asthma. The onset	HE	A chronic remitting and relapsing course of ulcerative colitis lasting 14 years and psoriasis of the skin (guttata) with

(*continued on next page*)

Table 1 (*continued*)

Nr/Sex/ Age	Illness	Setting and duration of healing	Mani-festations	Course	E	Evaluation
		people praying (7 years).		was instantaneous. No relapse.		polyarthritis for 2–3 years stopped after intercessory prayer. She regained full capacities (restarting sports). Immunosuppressive medications (TNF-alfa blockade, prednisone) were discontinued.
10. F 30–35	Ulcerative colitis, about to undergo colectomy	Prayer healing service (7 years).	Strong physical sensations; husband had a vision before the prayer	Instantaneous healing, gross reduction of diarrhea episodes, no relapse.	ME	Incapacitating diarrhea (40 times daily) due to ulcerative colitis, two university hospitals had indicated her for total colectomy. Healing was a few days prior to surgery, the operation was canceled. Not classified as unexplained since ulcerative lesions were still seen on follow-up coloscopy.
11. M 50–55	Medication induced hepatitis with vanishing bile duct syndrome	Intense prayers by different prayer groups at the same time (6 years).	Feeling of calm and lifted from bed at night in hospital, as if a positive power was around; neighbor also experienced a sensation	Rapid improvement starting after prayers, until full recovery	LE	Hepatitis after use of amoxycillin/ clavulanic acid, evolving into a vanishing bile duct syndrome with impending liver and kidney failure. Liver transplantation was envisaged. There was a sudden rapid recovery simultaneous with praying. Although using prednisone bilirubin levels were decreasing unusually fast from that moment on, with subsequent full recovery.

Table 2
Course of healing and associated manifestations.

Course of healing	TOTAL	Manifestations associated with healing (physical, emotional)		
		YES	NO	UNKNOWN
Instantaneous onset	23	20	3	0
Gradual recovery	2	2	0	0
Unknown	3**	1	2	0
	28*	23	5	0

*28 healings were evaluated as 2 healings were assessed in one case.
**physician/specialist reported healing to patient after investigations, instantaneity unknown (twice); comatose (once).

the psychiatrist in the assessment team did not find any indication to that effect. Fourthly, can these healings be considered as spontaneous remissions of serious chronic diseases? Although a lot is unknown about the nature and the causality of spontaneous remissions, as Radin pointed out,[24] one would expect the clinical course to be more gradual as well.

Additionally, what can one say about our repeated observation of substantial or even full functional recovery from serious diseases in the absence of improved organic markers? Matthews et al. reported similar findings when studying the effects of intercessory prayer in a group of 40 patients with rheumatoid arthritis.[25] At a 12-month follow-up there was a significant improvement in grip strength and patient-rated global functioning of 14% and 19% respectively, while ESR as a laboratory marker had not changed accordingly. Although methodologically obviously different from our study there was also this gap between functional and organic improvement. One wonders if there is a relationship between functional changes and an improved emotional state, perhaps mediated by (patho)physiological and biochemical pathways. Various types of stressors, such as psychological stress or visceral pain stimuli, have been shown to induce changes in the neuroendocrine system (notably the hypothalamic-pituitary-adrenal axis), autonomic functions and immune cell responses.[26] Conversely, one might think of positive effects resulting from these mechanisms in cases of an improved emotional state. But can this explain the instantaneity and the degrees of recovery shown in our study while there was often stress and no expectancy prior to the associated prayers? And can it explain the persistence of healing and personality changes? Moreover, other participants experienced both functional and organic improvement at the same time, as in the cases of anorexia, herpes keratitis and medication induced

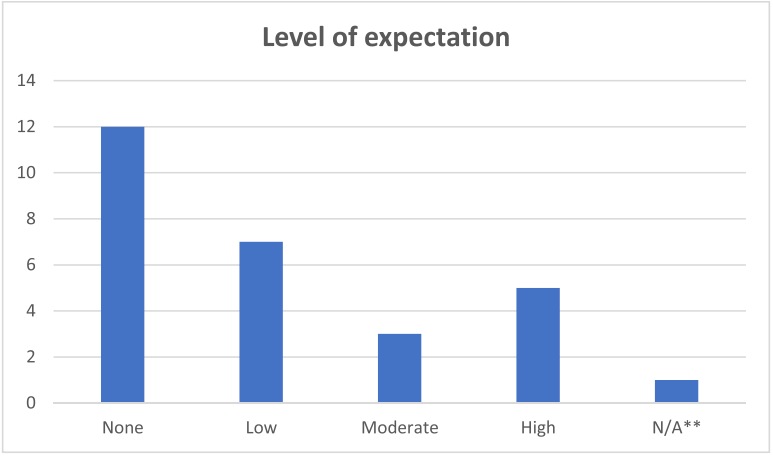

Fig. 1. Evaluation of expectancy 'to be healed by prayer' (as a retrospective self-report) for all 28 healings ** Not applicable: comatose state.

hepatitis. It is therefore difficult to find a common explanatory pathway for our healing reports, but it certainly challenges models of mind-body duality.

Step by step we realized that we needed a broader model when trying to understand our observations. What may be needed at this juncture is a horizontal epistemology (mode of knowing).[27] This is a way of studying and describing phenomena which considers all relevant perspectives to be valuable, both experiential and objective. The starting point should be listening carefully to the healing experiences of our participants, even more so as the same type of healing experience recurs persistently. This fits with 'person-centered forms of care' and its equivalent 'person--centered medicine' (PCM), which 'aims at a reformulation of the central mission of medicine, by recognizing the person as its fundamental focus and not simply as a carrier of disease'.[28] PCM is informed both by the wisdom of great ancient civilizations and by recent developments in clinical medicine and public health. It opens windows to other dimensions, as studied by theologians and philosophers. An inclusive and transdisciplinary approach may help provide a better understanding of the transformative experiences of the kind we found. This approach enables observations that can be likened to similar observations in other religious and non-religious settings.[29]

Finally, all participants interpreted their experiences as being of divine origin. Should we ignore this? Or should it lead us to consider the possibility of a 'realm beyond our senses', 'an acting God'? Certainly there is a similarity with New Testament stories of healings by Jesus.[30] Theology may be helpful in trying to find words for the healing experiences of our participants and many others with similar experiences.[31] Scientistic models, whether medical, psychological or social, assume that scientific methods are the only viable route to knowledge and truth. Such models exclude the option of an outside interference. As a result they have no vocabulary for the transformative nature of the participants' experiences in our study. Biblical narratives and other religious texts depict a wider transcendent perspective, drawing upon another language and referring to another reality. Without leaving the solid ground of medical knowledge we should not hesitate to explore these wider perspectives. By doing so, we would allow the boundary between the world of 'empirical data' and the world of 'wider perspectives' to be more porose than usually thought.

Margaret's case at the beginning of the article showed a 'gap' between 'facts' and 'experiences'. Both turned out to be relevant in our study as we found 'medically remarkable healings' and 'fascinating transformative experiences'. The patterns we observed should bring about a fruitful dialogue[32] between medical science, experiential knowledge and phenomenology as major sources of knowledge and both theology and philosophy as entrance to the wisdom and the rich narratives of age-old traditions. When grounded in a horizontal epistemology (ref 27), these perspectives will all be important and foster transdisciplinary discussions.

Future studies and more documentation are needed to further verify and clarify the patterns we found. This is a highly relevant field of study as it remains a largely understudied subject despite significant public interest.

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Supplementary materials

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