MI-12 The healer's own mind: burnout, moral injury and the limits of one person

HEALING after the FALL, research library, MI-12

Researched 10 October 2026 by Claude Opus agent for THRIVING after the FALL, Book Four. Library document, unverified.

The book's healer is one person with 300 lives on their mind. Every other report in this library assumes that person is present, rested, sober, honest about mistakes and still willing to open the door at three in the morning. This report tests that assumption. It asks how often people in that position have broken, left, drunk, hidden their errors or been blamed for the deaths they could not prevent, and what has actually kept them working.

Five boundaries. Supervision structures for lay counsellors are set out in MI-02 and are cited, not repeated (THRIVING library, MI-02). The record of barefoot doctors and community health workers is in FO-04 (THRIVING library, FO-04). The healer's own mourning was left to this report by MI-03 (THRIVING library, MI-03). Suicide prevention in the village is MI-08's ground, which was being written at the same time as this report and is referred to but not quoted. The organisation of relief, rotation and pay belongs to the GOVERNING volume of the series, and this report states only what the health evidence asks of it. Two further organisation reports, OR-01 and OR-08, were not yet written when this report was made, and their ground is left to them.

A point of method. Almost every figure below comes from a self-report questionnaire, most often the Maslach Burnout Inventory, scored with thresholds that differ between studies. The numbers say how many people ticked boxes above a line. They do not say how many people stopped functioning. Where a study measured something harder, such as leaving the job, making a serious error or dying by suicide, I say so.

1. The load: how many healers are unwell, and how we know

Expatriate aid workers. The best longitudinal study followed 212 international staff of 19 non-governmental organisations from before deployment, through return, to three to six months later (Cardozo 2012). Deployments lasted 3 to 12 months. Of the 212, 169 (80 per cent) were surveyed after deployment and 154 (73 per cent) at follow-up. Depressive symptoms rose from 10.4 per cent before deployment to 19.5 per cent after it and 20.1 per cent at follow-up. Anxiety rose from 3.8 to 11.8 per cent after deployment. Emotional exhaustion rose and was still raised months after return. Depersonalisation, the cold and distanced attitude to the people one serves, rose after deployment. A history of mental illness predicted anxiety (adjusted odds ratio 4.2, 95 per cent confidence interval 1.45 to 12.50). Social support was protective against depression (adjusted odds ratio 0.9 per unit of support) and chronic stress predicted both depression and emotional exhaustion (adjusted odds ratio 1.1 per unit). The finding that matters for the village is the shape of the curve. Depression did not fall when the worker came home. It doubled and stayed doubled.

A 2024 systematic review pooled nine studies of 3,619 aid workers (Cameron 2024). Depression was 24.1 per cent (95 per cent confidence interval 15.1 to 36.1), anxiety 18.2 per cent, post-traumatic stress disorder 9.6 per cent, burnout 25.6 per cent (21.1 to 30.8) and psychological distress 30.8 per cent. Hazardous alcohol use ranged from 16.2 to

50 per cent and was not pooled. Organisational support was protective. Nearly every measure was self-report. An earlier review of 12 studies of relief workers and five of organisations reached the same general conclusion and noted the weakness of the designs (Connorton 2012, abstract only).

National staff. The people who stay are worse off than the people who fly in. In Gulu, northern Uganda, 376 national staff of 21 agencies were surveyed (Ager 2012, read through the abstract and the university press release). Sixty-eight per cent were at high risk of depression, 53 per cent of anxiety and 26 per cent of post-traumatic stress disorder, with a quarter to a half at risk of burnout. Women reported more symptoms. The protective factors were social support, team cohesion and less chronic stress. The chronic stressors named were financial hardship and the unequal treatment of national and expatriate staff. The village healer after the Fall is a national staff member in this sense: local, unpaid or poorly paid, living among the patients and unable to leave.

Physicians. The physician literature is the largest and the least comparable. A systematic review of 182 studies of 109,628 physicians in 45 countries found 142 different definitions of burnout and reported prevalence from 0 to 80.5 per cent (Rotenstein 2018). The authors could not pool the figures. This is the measurement critique in one sentence: the same profession, measured differently, is either untouched or mostly burnt out. The harder outcome is depression among resident physicians, pooled at 28.8 per cent (25.3 to 32.5), with a median absolute rise of 15.8 percentage points in depressive symptoms after the start of residency (Mata 2015, abstract only).

Health workers in poor settings. A systematic review of 65 articles from sub-Saharan Africa found high emotional exhaustion in 12.5 to 65.2 per cent of health workers, high depersonalisation in 5 to 57.8 per cent and low personal accomplishment in 25 to 85.1 per cent (Dubale 2019). The Maslach inventory had not been validated in the region. Workload, staffing and pay were the main risk factors, and support from colleagues was protective. Only two intervention studies were found. A national survey of Ethiopian health extension workers, the closest modern analogue to the village healer, compared 584 rural and 581 urban workers (Birhane 2023, read through a search summary because the full text was behind a captcha). Burnout risk was reported at 39.8 per cent among rural workers and 12.6 per cent among urban ones, and depression on the PHQ-9 at 16.5 and 8.9 per cent [VERIFY: figures from a search summary, not the paper]. The direction, rural worse than urban, matches the Alaska and Ugandan findings below.

Ebola, 2014 to 2015. Health workers in Guinea, Liberia and Sierra Leone were 21 to 32 times more likely to be infected than the general adult population, and about two-thirds of those with a known outcome died (World Health Organization 2015, read through a summary). Interviews with 35 providers in Bo and Kenema, Sierra Leone, between December 2014 and January 2015, recorded what the numbers miss (McMahon 2016). Providers were shunned by neighbours. Their children were turned away. Families urged them to quit, and some did. They mourned colleagues and slept badly. One was told by a neighbour that no one would take their child because the healer could not be trusted. The danger that drove people from the work was not only the virus. It was the village.

What this section shows. Across very different settings, something like a quarter of people doing this work report depression or burnout at any one time, the figure roughly doubles with a hard deployment, and the people with least support, least pay and least distance from the patients fare worst. The exact numbers are soft. The direction is consistent.

2. Leaving: attrition and what predicts it

Burnout matters to the village because it ends in leaving. The village of 300 will have one healer and perhaps one deputy. If either goes, the medicine goes with them.

The range. A review of lay health worker attrition found rates from 3.2 to 77 per cent in programmes of the 1980s (Nkonki 2011). The brief describes this range as annual, but many of the studies counted losses over a programme's life rather than per year, so the range should be read as losses over time, not a yearly rate. Some examples from the same review: 43 per cent in a Bolivian programme, 11 of 12 workers lost in under a year in a South African tuberculosis programme, 32 of 43 lost over four years in a Bangladeshi newborn programme. Nepal's Female Community Health

Volunteers lost under 5 per cent a year over twenty years, yet seven districts recorded turnover of 40 to 55 per cent. The authors judged the worst cost to be broken continuity of care, together with lower morale among those who stayed.

The determinants fell into three groups (Nkonki 2011). Individual: age, marital status, education, family support, other paid work, lack of time and lack of profit. Programme: inadequate or irregular pay, poor selection, unclear roles, absent or punitive supervision, poor training, heavy workload and weak leadership. Community: recognition, community support and the farming calendar. FO-04 adds that volunteers leave more often than salaried workers, that community-financed workers leave at about twice the rate of salaried ones, and that supervision is "often among the weakest links" in the programmes reviewed (THRIVING library, FO-04). MI-02 records the sharpest single comparison: in one trial, unpaid peer counsellors were lost at 35 per cent (23 of 66) against none of the paid ones (THRIVING library, MI-02).

BRAC. In Bangladesh, BRAC's volunteer health workers, the shasthya shebika, had a dropout rate of 44 per cent in one study area and 32 per cent across the programme in a 1997 report (BRAC 1997, read through a summary). The reasons given were lack of time, lack of "profit" and family disapproval. Each dropout cost the programme about US$24 in lost training [VERIFY: all BRAC figures here come through a summary, not the 1997 report]. The point for the village is that the healer has a household, and the household decides whether the healer can go on.

The Alaska health aides. The single best study of why village healers stay or go is a qualitative study of Alaska's Community Health Aides, based on 146 interviews in 15 villages, ten with low attrition and five with high (Landon 2004). The aides are village people hired first and trained over 16 weeks spread across two to three years, working alone or in pairs in remote clinics, on call through the night. In 1988 the programme was losing about a third of its workforce a year. By fiscal year 1999 annual attrition had fallen back to about 20 per cent.

Five factors separated villages where aides stayed from villages where they left. First, co-worker support, meaning a second aide in the clinic. Second, timely basic training, so that the new aide was not alone with cases they could not yet manage. Third, a fully staffed clinic, because when a post was empty the remaining aide carried all the call. Fourth, community support, including councils that defended aides against gossip. Fifth, family support. Aides in high-attrition villages were on call more often. Because of confidentiality they could not talk about cases with their own families, so a co-worker was the only person they could talk to. The study named a "cycle of burnout": an aide leaves, the remaining aide carries more call, burns out and leaves in turn. The aides' own recommendations were plain: rest after a hard night on call, no making up call missed during leave, pay for call, and councils that defend the aide in public. One aide said that no amount of pay would make the job worth doing. That line is the case for the protective structure. Money alone did not hold people.

Barefoot doctors. China trained more than a million barefoot doctors, who spent about half their day farming and whose system collapsed after decollectivisation in the early 1980s (THRIVING library, FO-04). I could not read Fang 2012 directly. FO-04 used it through reviews, and I found no data in it on the barefoot doctors' own mental health or burnout. The lesson FO-04 draws, that the system died when the collective that paid and backed the healer died, is the most important attrition finding in the library and needs no repeating here.

Jamkhed. The Comprehensive Rural Health Project at Jamkhed, India, chose its village health workers through the village, trained them weekly and backed them with a mobile team and a 40-bed hospital (THRIVING library, FO-04). I found no published retention figure.

What this section shows. The predictors of leaving are almost all structural. Pay, a second worker, timely training, supervision, family consent and the village's public defence of the healer appear in study after study. Personal resilience does not appear as a predictor in any of these reviews.

3. Moral injury and the second victim

Burnout is exhaustion. Moral injury is something different, and the village healer is exposed to it every time there is not enough of something.

Shay and Litz. Jonathan Shay, a psychiatrist treating Vietnam veterans, described moral injury as a betrayal of what is right, by someone who holds legitimate authority, in a situation of high stakes (Shay 1994, read through secondary accounts). For Shay the injury came from leaders. Litz and colleagues widened the idea to the person's own acts and omissions: doing, failing to prevent, or witnessing something that violates one's deepest moral beliefs and expectations (Litz 2009). Their model turns on the difference between guilt and shame. Guilt says I did a bad thing. Shame says I am bad. When the person explains the act to themselves as global, internal and permanent, shame follows, and shame leads to withdrawal and concealment. Concealment blocks the very experience that would correct the belief, which is being accepted by peers, leaders and community after the truth is known. Litz proposed an eight-part repair: connection, preparation and education, a modified form of exposure to the memory, examination and integration of its meaning, an imagined dialogue with a respected moral authority, reparation and forgiveness, reconnection with others, and planning for the long haul. The authors offered it as preliminary and untested.

For the village the mechanism matters more than the therapy. A healer who has rationed the last antibiotics, or failed to save a child, or given a dose that harmed, will be pushed by shame towards hiding. FO-08 already records that unfair triage decisions produce moral injury and loss of trust (THRIVING library, FO-08). This report adds that the hiding is itself the injury's engine.

How strong is the link? A systematic review of 13 studies of 6,373 people, mostly military, found that exposure to potentially morally injurious events explained 9.4 per cent of the variance in post-traumatic stress disorder, 5.2 per cent in depression and 2.0 per cent in suicidality (Williamson 2018, abstract only). The authors called their conclusions tentative. The effect is real and modest. Writing for clinicians in March 2020, Greenberg and colleagues stressed that moral injury is not a mental illness, that the shame and guilt can lead on to depression and post-traumatic stress disorder, and that managers should prepare staff in advance for the decisions they would face rather than leave them to discover the weight alone (Greenberg 2020, abstract only).

Treatment. A meta-analysis of randomised trials of treatments aimed at moral injury found pooled effects of about g -0.60 on mental health outcomes and -0.51 on hallmark moral injury symptoms, but control groups also improved (Aita 2023, abstract only). A 2024 review found no randomised trial with moral injury itself as the primary outcome and concluded that no best practice can yet be named (Walker 2024, read through a search summary). There is no evidence-based treatment of moral injury to give the village. There is a mechanism to work against: concealment.

The second victim. In 2000 Albert Wu named the doctor who makes a serious error the "second victim" (Wu 2000). He described a culture of blame and denial in which the doctor carries the error alone. Some lose their nerve, some burn out, some turn to alcohol or drugs. His prescription was disclosure to the patient, colleagues who listen, and senior doctors who share their own mistakes in open discussion. His opening claim is the one the book should print: "Physicians will always make mistakes" (Wu 2000). The term has been attacked by patient advocates as diverting sympathy from the people actually harmed (Clarkson 2019). The phenomenon it describes is not in dispute.

How common is it? A systematic review of 32 research articles found second-victim experiences in 10.4 to 43.3 per cent of health professionals after adverse events (Seys 2013, read through a summary). A survey of 3,171 physicians in the United States and Canada found that after an error 61 per cent reported increased anxiety about future errors, 44 per cent lost confidence, 42 per cent had trouble sleeping and 42 per cent felt less satisfied with their work (Waterman 2007, abstract only). Physicians dissatisfied with how the error had been disclosed to the patient were far more likely to be distressed (odds ratio 3.86), and only about one in ten felt their organisation had supported them. A 2026 review of 38 studies of nurses found that second-victim experiences were associated with intention to leave (odds ratio 2.99) and absence from work (risk ratio 2.21) (Liu 2026, abstract only). The error leads to leaving.

4. The error cycle, and the healer who hides

Errors cause distress, and distress causes errors. In a prospective study of 184 internal medicine residents surveyed every three months, 34 per cent reported at least one major medical error during the study, about 15 per cent in any given quarter (West 2006, abstract only). Reporting an error was followed by more depressive symptoms at the next survey (odds ratio 3.29, 1.90 to 5.64), and burnout and depression were followed by more errors in the next three months. The relationship ran both ways. A tired, ashamed healer makes more mistakes, and each mistake makes the healer more tired and more ashamed.

Fatigue is the lever the village controls. The strongest causal evidence in this report comes from a randomised trial of interns' hours in intensive care. On the traditional schedule, with recurring extended shifts of 24 hours or more, interns made 35.9 per cent more serious medical errors than on a schedule without such shifts (136.0 against 100.1 per 1,000 patient-days) and 5.6 times as many serious diagnostic errors (Landrigan 2004, abstract only). The village healer will often face the equivalent of a 24-hour shift: a long labour, a fever that turns at night, a wound that keeps bleeding. The trial says the healer's judgement after such a night is measurably worse.

A retracted finding. A 2018 meta-analysis that linked physician burnout to patient safety incidents (odds ratio 1.96) was widely quoted and then retracted in May 2020 because of errors in its review process (Retraction Watch 2020). The link between fatigue and error rests on Landrigan's trial and West's cohort, not on that review. Anyone writing for the book should not cite the retracted paper.

Hiding. The brief names the healer who hides errors from fear of the village. The evidence supports the fear. Waterman's physicians feared damage to their reputation (13 per cent reported it), and the Ebola providers were shunned for a risk they had not chosen (Waterman 2007, McMahon 2016). Section 5 shows that crowds have killed healers. Litz's model says that concealment prevents repair. Wu's prescription says that disclosure among colleagues is the start of it. The village therefore needs a place where the healer can tell the truth about a death without that truth becoming a weapon. That place is a confidential review with the deputy or district supervisor, held after every death the healer attended, as MI-03 already proposed for the healer's grief (THRIVING library, MI-03). Whether what is said there can ever be used against the healer in a village dispute is a rule the owner must set [OWNER].

5. The healer blamed

The cholera riots of 1831 to 1832. Cholera reached Russia in 1830 and Britain in late 1831. In Russia, riots broke out at Tambov in November 1830 and in St Petersburg in June 1831, where a crowd at Sennaya Square attacked a cholera hospital and its doctors, and in the military settlements around Novgorod (Wikipedia contributors 2026, read in full). Cohn counted at least 72 cholera riots in the British Isles between November 1831 and January 1833 (Cohn 2017, read as the accepted manuscript). Their target was not minorities or the rich. It was the medical profession. Crowds believed doctors were killing the poor to supply anatomists, a fear grounded in the recent Burke and Hare murders and the Anatomy Act. In Liverpool there were eight major riots between 29 May and 10 June 1832, with doctors called "Burkers" (Wikipedia contributors 2026, Burrell 2005). In Edinburgh crowds chanted for the doctors to be killed (Cohn 2017). In Ireland it was rumoured that doctors were paid £5 for every patient who died (Cohn 2017). Troops were called only four times in Britain, and no protester was killed. In Russia the second wave, in 1892, was far worse: at Astrakhan a crowd of 10,000 to 30,000 burned hospitals, and at Saratov and Pokrovsk medical assistants were killed (Cohn 2017). I did not find a named list of physicians killed in Russia in 1830 to 1831 [VERIFY].

Three lessons transfer. Suspicion falls on the healer when deaths cluster and the treatment is unfamiliar. The rumour is specific, usually that the healer gains from the death. And the riots happened where the healer was seen as an outsider sent by authority, as the cholera boards were [VERIFY: inference from Cohn's account]. The village healer after the Fall is an insider, which may protect them [VERIFY: inference]. But the village healer also controls the scarce medicines, and the Ebola record shows that insiders too can be shunned.

Witch accusations. The popular story that midwives and healers were the main victims of the European witch trials does not survive the archives. Harley showed that the midwife-witch was a creation of the demonologists' books, taken up by historians, with little support in the trial records (Harley 1990, read through a summary). That is a useful corrective to the heroic narrative. It does not mean healers were safe. In parts of East Africa in recent decades, older women have been killed after being named as witches, and traditional healers have sometimes done the naming [VERIFY: search results only, no source read]. The healer can be both the accused and the accuser. A village that lets a healer explain deaths by naming a neighbour has handed the healer a weapon, and a village that lets a crowd explain deaths by naming the healer has done the same in reverse.

Ebola, again. In Sierra Leone the shunning of health workers was not violence, but it drove some from the work and isolated those who stayed (McMahon 2016). Fear of contagion and suspicion of the healer were tangled together.

What the village can do. The historical record points to a few structures. Make deaths and their causes public in a calm, regular way, through a death register read to the council [OWNER], rather than leaving rumours to fill the silence. Have a second person present at the dying and the dispensing, so that no one can say the healer acted alone and unseen. Forbid any public accusation against the healer after a death until the confidential review has met [OWNER]. And decide in advance who will stand beside the healer in public when a crowd turns [OWNER]. The Alaska councils that defended aides against gossip are the modern form of this protection (Landon 2004).

6. The single-handed healer: Sassall, 1918, suicide and drink

A Fortunate Man. In 1967 John Berger and the photographer Jean Mohr published a portrait of a single-handed country doctor in the Forest of Dean, whom they called John Sassall (Berger 1967). He was Dr John Eskell of St Briavels. The book shows a doctor who knows every patient, is always available and finds meaning in being so. It also records his episodes of depression, which the book links to overwork and his sense of inadequacy before his patients' suffering. Fifteen years later, in 1982, after the death of his wife, Eskell killed himself (British Journal of General Practice 2015, Reading the Forest 2018, both secondary). The date of her death and the method are not confirmed in what I read [VERIFY]. The book is often read as the ideal of the general practitioner. It is also a record of what that ideal costs a single person with no partner in the work.

The 1918 physicians. Doctors and nurses in the 1918 influenza pandemic died at lower rates than their patients, though with wide variation between places (Shanks 2011, abstract only). In Philadelphia more than a quarter of physicians were reported away with the war, and as many as half of the Red Cross nurses were reported ill [VERIFY: secondary web sources only, not cited as references]. I found no source linking the physicians' overwork in 1918 to their later illness, suicide or leaving the profession. The 1918 record is mainly a record of shortage, not of the healer's mind.

Suicide among doctors. A meta-analysis of 25 studies found a suicide rate ratio for physicians against the general population of 1.41 (1.21 to 1.65) for men and 2.27 (1.90 to 2.73) for women (Schernhammer 2004, abstract only). A later meta-analysis found a standardised mortality ratio from suicide of 1.44 (1.16 to 1.72) among physicians, higher among women (about 1.9) and among anaesthetists, psychiatrists, general practitioners and surgeons, with the excess falling over time (Dutheil 2019, abstract only). Among physicians, suicidal ideation was reported by about 17 per cent and attempts by about 1 per cent. The excess among doctors is usually explained by knowledge of and access to lethal drugs as well as by distress. The village healer will hold the village's opioids and sedatives. MI-08 covers means restriction for the village. This report adds only that the healer is inside that circle, not outside it.

Drink and drugs. Physicians in a 1992 national survey (9,600 sampled, 59 per cent response) used more alcohol, minor opiates and benzodiazepines than their non-physician peers, mostly to treat themselves (Hughes 1992, abstract only). Among 7,197 American surgeons, 15.4 per cent met criteria for alcohol abuse or dependence: 13.9 per cent of men and 25.6 per cent of women (Oreskovich 2012, abstract only). Alcohol problems were associated with having reported a major medical error in the past three months (odds ratio 1.45), with burnout (1.25) and with depression

(1.48). Wu named drink and drugs among the ways the second victim copes (Wu 2000). Cameron's review found hazardous alcohol use in 16 to 50 per cent of aid workers in the studies that measured it (Cameron 2024).

The other side is that physicians who are treated do well. Of 904 physicians enrolled in 16 state physician health programmes in the United States, followed for five years, 78.7 per cent were licensed and working at the end, 19.3 per cent failed to complete the programme, 10.8 per cent had their licence revoked and 3.7 per cent had died (McLellan 2008, abstract only). About four in five of those who completed had no positive urine test over five years. The programme combined treatment, long-term monitoring and the real threat of losing the right to practise. MI-06 covers withdrawal and addiction for the village (THRIVING library, MI-06), but I found no section there on the healer's own use of the sedatives and opioids the healer controls, so the rule is set out here. The healer must never be the only person with access to them [OWNER]. A second key holder, a count at each meeting and a register signed by both is the minimum. The village should treat the healer's drinking as a matter for the council, not as private, because the healer's judgement is a public good [OWNER].

7. What has protected healers

Organisation beats self-help. Two systematic reviews frame everything else. West and colleagues pooled 15 randomised trials of 716 physicians and 37 cohort studies of 2,914 (West 2016, abstract only). Interventions reduced overall burnout from 54 to 44 per cent (difference 10 points, 95 per cent confidence interval 5 to 14), high emotional exhaustion from 38 to 24 per cent and high depersonalisation from 38 to 34 per cent. Both individual and structural interventions worked. Panagioti and colleagues pooled 20 controlled comparisons in 1,550 physicians and found a small overall effect, a standardised mean difference of -0.29 (-0.42 to -0.16), about three points on the emotional exhaustion scale (Panagioti 2017, abstract only). Interventions directed at the organisation had about two and a half times the effect of those directed at the individual doctor (-0.45 against -0.18). This review was not retracted. The 2018 paper by some of the same authors was. Shanafelt and Noseworthy, writing from the Mayo Clinic, concluded that individual approaches are not enough without changes to the work, and set out nine organisational strategies (Shanafelt 2017, read through summaries).

The small group with protected time. The best single trial in the field randomised 74 Mayo Clinic physicians to facilitated small-group discussion or to protected time alone (West 2014, abstract only). The groups met 19 times over nine months, every other week, for an hour of paid time. Discussion covered meaning in work, mistakes, balance and reflection. High depersonalisation fell by 15.5 percentage points in the group arm against a rise of 0.8 points in controls, and the gain held at twelve months. Engagement rose. There was no effect on depression or stress. This is the most transferable model for a district: a fortnightly hour, with peers, about the work, in protected time.

Schwartz Rounds. In Schwartz Center Rounds, staff from all levels meet monthly to hear colleagues describe the emotional side of a case, with discussion afterwards. An evaluation across ten English sites surveyed 1,140 staff at baseline and 500 at follow-up (Maben 2018, read through the report summary). Poor psychological wellbeing on the General Health Questionnaire fell from 25 to 12 per cent among regular attenders against 37 to 34 per cent among non-attenders. The study was not randomised, attenders chose to attend and the measure was self-report. It is evidence of association with a plausible mechanism.

Peer support after trauma. TRiM, a British military system in which trained peers assess colleagues after traumatic incidents, was tested in a cluster randomised trial across twelve warships (Greenberg 2010, abstract only). At 12 to 18 months it made no significant difference to psychological health or to stigma, though few traumatic incidents occurred during the trial and organisational functioning was modestly better. The honest reading is that peer assessment after trauma has not been shown to protect mental health. The Antares Foundation guidelines for humanitarian agencies, based on expert consensus rather than trials, set eight principles from policy and screening through monitoring, ongoing support, crisis support and end-of-assignment care (Antares Foundation 2012, read in full). They ask agencies to monitor stress routinely rather than only when someone complains, because many staff keep up a front of toughness and do not recognise stress in themselves. They ask for written limits on shift length and

workload, required rest, and rules that staff actually take their leave. And they note that middle managers, who carry both their own work and their staff's distress, often have no peers close at hand. That is the village healer's position exactly. MSF runs psychosocial care for its staff at headquarters, section and regional level, but I found no outcome evaluation, only a 2025 perception study of a support-group programme based on 24 staff interviews (MSF 2025, read through the summary).

Resilience training. The Cochrane review of psychological interventions to foster resilience in health professionals found 44 randomised trials, 36 in high-income countries (Kunzler 2020, read through the plain-language summary). Interventions improved self-rated resilience (standardised mean difference 0.45, 12 trials, 690 people), depression (-0.29, 14 trials, 788 people) and stress (-0.61, 17 trials, 997 people), with no clear effect on anxiety or wellbeing. The certainty of every result was very low, and few trials followed people for long. A resilience course may help someone feel better able to cope. It does not change the number of nights on call.

Debriefing. Single-session psychological debriefing after a traumatic event did not prevent post-traumatic stress disorder (odds ratio 1.22), and one trial found more PTSD a year later among those debriefed (odds ratio 2.88, 1.11 to 7.53, though MI-01 found a second rendering of 2.51) (Rose 2002, abstract only). MI-01 already grades it X for the village (THRIVING library, MI-01). The same rule applies to the healer. A compulsory talk-through of the horror on the day of a death is not the same as Wu's colleagues who listen or West's fortnightly group, and may be worse than nothing.

Rest and rotation. The evidence for rest is indirect but strong: Landrigan's trial shows that removing 24-hour shifts cuts serious errors by about a quarter (Landrigan 2004). The Alaska aides asked for rest after a hard night and no make-up call (Landon 2004). Antares asks for written maximums and required leave (Antares Foundation 2012). The organisation of relief, rotation and pay belongs to the GOVERNING volume. What the health evidence asks of it is that no healer be the only person on call for the village for more than a few nights in a row [OWNER, VERIFY: inference from Landrigan and Landon, no trial of village call patterns].

Supervision. MI-02 found that supervision is what keeps the lay counsellor's role alive, that Problem Management Plus used groups of four to six counsellors meeting for two to three hours a week, that a village of 300 cannot form such a group on its own, and that a district supervisor needs one to two days a week to supervise village workers (THRIVING library, MI-02). MI-02 also recorded that nobody has measured how many cases a lay counsellor can carry before burning out, and set a stopping rule when a counsellor has carried a case home for two weeks. Those findings apply to the healer as much as to the counsellor. The district, not the village, is where the healer's peer group must sit.

The two-healer rule. No trial has tested two healers against one. The case rests on convergent evidence. Co-worker support was the first factor separating low-attrition from high-attrition villages in Alaska, and a second aide was the only person the first could talk to (Landon 2004). Ager's national staff were protected by team cohesion (Ager 2012). Two-person dispensing checks errors (THRIVING library, SY-01). A second person present at deaths answers suspicion. FO-04 already recommends two healers per village (THRIVING library, FO-04). I treat never one alone as an inference with strong support, not as a tested intervention [VERIFY].

8. What this means for one healer and 300 people

Put the numbers into a village. If a quarter of people doing this work are depressed or burnt out at any one time, a village with one healer will spend some of every few years with a healer who is not well [VERIFY: inference from population prevalence applied to one person]. If attrition runs at 20 per cent a year, as it did among the Alaska aides with a mature programme behind them, the expected working life of a healer in post is about five years, and the village must train a replacement before it needs one. If errors double with exhaustion and shame, the healer's tiredness is a clinical risk to the village, not a private matter.

The evidence points to four structural protections, in descending order of strength. Rest, because fatigue causes

errors in a randomised trial. An organisational structure, because organisation-directed interventions outperform individual ones in two reviews. A peer group with protected time, because West's trial showed a lasting effect from a fortnightly hour. A second healer, because the Alaska study, the Ugandan national staff and the error-checking literature all point the same way. Personal resilience training comes last, with very low certainty, and debriefing should be avoided.

Evidence grades

Claim or intervention	Grade	Basis
Burnout and depression are common in healers, about a quarter at any time	B	Reviews of self-report surveys (Cameron 2024, Dubale 2019, Mata 2015). Measurement inconsistent (Rotenstein 2018)
Hard deployment doubles depression, which persists after return	B	One longitudinal cohort (Cardozo 2012)
Lay health worker attrition is high and driven by pay, supervision, support and workload	B	Review and qualitative series (Nkonki 2011, Landon 2004)
Long shifts increase serious errors	A	Randomised trial (Landrigan 2004)
Errors and distress feed each other	B	Prospective cohort (West 2006)
Organisation-directed interventions reduce burnout more than individual ones	A	Meta-analyses (Panagioti 2017, West 2016)
Fortnightly facilitated peer group with protected time	A	One randomised trial (West 2014)
Schwartz Rounds	B	Controlled observational evaluation (Maben 2018)
Resilience training	B	Many trials but very low certainty (Kunzler 2020)
Peer trauma assessment (TRiM) protects mental health	D	Cluster trial showed no effect (Greenberg 2010)
Single-session debriefing	X	Cochrane review, possible harm (Rose 2002)
Moral injury treatment	D	No trial with moral injury as primary outcome (Walker 2024)
Two-healer rule	C	Convergent evidence, no trial
Physician health programmes for addiction	B	Five-year cohort (McLellan 2008)

Means ledger

Rung	What it can do for the healer
Hands and knowledge	Know the signs of exhaustion and shame in oneself. Keep a written rota. Tell one person the truth after each death

Rung	What it can do for the healer
Hearth	A household that has agreed to the healer's role and can say no for them at night. A place to sleep undisturbed
Garden and still	Spirits and sedatives held under two keys, counted, never self-prescribed
Village dispensary of 300	Two healers. A rota. A death register. A council that defends the healer in public. A confidential review after each death
District infirmary of 3,000	A fortnightly or monthly peer group of village healers. A supervisor who can stand a healer down, and a reserve healer to send
Hospital before the Fall	Occupational health services, physician health programmes, Schwartz Rounds, therapy for moral injury and depression

Harm test

How it harms. The failing healer harms patients through errors, through cruelty and distance (depersonalisation), through drinking or self-medication, and finally by leaving. The village harms the healer through overwork, blame and the expectation of heroism.

The error that harms. Treating burnout as a personal weakness to be fixed by training, while leaving the healer alone on call. Making the healer the only person with the keys to the drugs. Allowing a public accusation after a death before anyone knows what happened. Insisting on a group debriefing on the day of a death.

Who must never receive it. A healer with a recent major error, a bereavement or a drinking problem must not be left alone on call. A healer who has had suicidal thoughts must not hold the only key to the opioids and sedatives (see MI-08).

Signs it is going wrong. Rising irritability or coldness towards patients. Lateness, missed visits and unrecorded doses. More drinking, or drugs going missing. Avoiding the review, refusing leave, insisting on working alone. Sleeplessness, talk of being useless or of not being needed. These are set out in the protocol below.

What to do. Stand the healer down for a set period, with the deputy or district reserve covering. Talk with them privately. Count the medicines. Refer to the district supervisor. Follow MI-08 if there is risk of suicide.

Historical cases. The Alaska cycle of burnout, in which each departure loaded the remaining aide until they left in turn (Landon 2004). The cholera riots, in which healers were attacked as killers (Cohn 2017). Dr Eskell, the single-handed country doctor who killed himself after his wife's death (Berger 1967 and secondary sources). The Sierra Leone health workers whose children were shunned (McMahon 2016).

Red flags

- The healer is the only person on call for more than three nights running [VERIFY: threshold is an inference]
- The healer has not taken a full day off in two weeks
- Medicines or spirits do not match the register
- The healer hides or minimises a death or error at review
- A crowd or family accuses the healer in public after a death
- The healer talks of being worthless, of having killed someone, or of not wanting to go on (follow MI-08)
- The healer's household asks the council to make them stop

- The deputy has left or fallen ill and has not been replaced

The case against

The first objection is that this whole field medicalises ordinary hardship. Lisa Rotenstein and colleagues found 142 definitions of burnout and prevalence from 0 to 80.5 per cent, which means the headline figures tell us little (Rotenstein 2018). Simon Wessely and his co-authors showed that well-meant early talk after trauma can harm (Rose 2002). Neil Greenberg and colleagues insisted that moral injury is not a mental illness (Greenberg 2020). If the village treats every tired healer as a case, it may teach them to see themselves as broken.

A second objection comes from patient-safety advocates such as Clarkson and colleagues, who argue that calling the doctor a second victim takes attention from the patient and family who were actually harmed (Clarkson 2019). A village that protects its healer from blame must not protect them from accountability.

A third objection is historical. Many healers worked alone for decades without collapse, and A Fortunate Man is still read as a model of the good doctor. Single-handed rural practice was the norm for centuries. The rebuttal is that we hear about the survivors, and that even Berger's portrait records depression. The record of 1918 and of the cholera years says more about danger than about the mind.

A fourth objection is cost. A second healer, a reserve and a district supervisor cost a village of 300 labour it may not have. GOVERNING must weigh that. The evidence here says only that one healer alone is likely to be lost within a few years, and that replacing them is slower and more costly than supporting them.

Tested against the evidence, the case against holds for debriefing, for the vagueness of burnout scales and for the risk of excusing harm. It does not hold against rest, organisational support, peer groups or a second healer, each of which has harder evidence behind it than the scales.

10-line summary

1. About a quarter of healers report depression or burnout at any time, and the measures are soft (Cameron 2024, Rotenstein 2018).
2. A hard deployment doubled depression in aid workers, and it stayed doubled after return (Cardozo 2012).
3. Lay health worker attrition ranged from 3 to 77 per cent, driven by pay, supervision, support and workload (Nkonki 2011).
4. Alaska's aides stayed where there was a co-worker, timely training, a full clinic, community and family support (Landon 2004).
5. Errors cause depression and depression causes errors (West 2006), and 24-hour shifts raise serious errors by about a third (Landrigan 2004).
6. Moral injury drives shame and concealment, and concealment blocks repair (Litz 2009).
7. Crowds have attacked healers as killers in epidemics, at least 72 times in Britain in 1831 to 1833 (Cohn 2017).
8. Doctors die by suicide at 1.4 to 2.3 times the population rate and drink more than they should (Schernhammer 2004, Oreskovich 2012).
9. Organisational changes and fortnightly peer groups outperform individual resilience training, and debriefing may harm (Panagioti 2017, West 2014, Rose 2002).
10. Never leave one healer alone: two healers, a rota, two keys, a death review and a district peer group.

Open questions

- How many deaths or hard cases a lay healer can carry in a year before burning out has never been measured.
- No trial compares one healer with two.
- Whether insiders are safer from blame than outsiders in an epidemic is unknown.

- No measure of burnout has been validated for village healers without formal training.
- Whether the confidential review of deaths can stay confidential in a village of 300 is a question for the owner and for GOVERNING.
- Whether modern accusations of witchcraft against healers follow epidemics needs a proper source.
- Whether the barefoot doctors' collapse included burnout, or only the loss of pay and backing, is not recorded in the sources found.

Sources to read in full

- Landon 2004, the Alaska health aide study. The best evidence on why village healers stay or leave.
- Litz 2009. The mechanism of moral injury and the logic of repair.
- Cohn 2017. The best account of the cholera riots against doctors.
- Antares Foundation 2012. A practical set of standards for agencies.
- West 2014. The small-group trial, for its method and session topics.
- Berger and Mohr 1967, A Fortunate Man. For the picture of the single-handed doctor.
- Fang 2012, Barefoot Doctors and Western Medicine in China. Not read for this report.

At the bedside after the Fall

Household. The healer's household must agree to the role before it is taken. What it needs to start: a sleeping place the healer can use undisturbed, one person who answers the door at night, and a rule that the healer's meals and sleep are protected on rest days. First failure to expect: the household lets the healer be called on every night because no one wants to turn a neighbour away.

Village of 300. What it needs to start: two healers or a healer and a trained deputy, a written rota, a register of medicines with two keys, a death register, a council member named to defend the healer in public, and a rule that no one may accuse the healer of a death until the review has met [OWNER]. First failure to expect: the deputy drifts away because no one pays or trains them, and the healer is quietly back on call alone.

District of 3,000. What it needs to start: a supervisor who visits each village healer at least monthly, a peer meeting of village healers every two to four weeks [VERIFY: frequency inferred from West 2014 and MI-02], a reserve healer who can be sent when a village healer is stood down, and the authority to stand a healer down [OWNER]. First failure to expect: the peer meeting turns into a complaint session or a training session and stops covering errors and deaths.

Protocols

Protocol A. The healer's weekly discipline

- ☐ One full day off in seven, with the deputy covering. No exceptions in the first week of a new healer's work [OWNER].
- ☐ No more than three nights in a row on call. After a night with more than about four hours awake for a patient, no planned work before midday [VERIFY: inference from Landrigan 2004 and Landon 2004].
- ☐ One hour every two weeks with peers or the supervisor, about cases, errors and deaths, not only about supplies (West 2014).
- ☐ A short talk with the deputy or supervisor after every death the healer attended, within 72 hours, about what happened, not a debriefing of feelings (THRIVING library, MI-03, Rose 2002) [VERIFY: timing is an inference].
- ☐ Medicines and spirits counted with the second key holder once a week.
- ☐ Healer records their own sleep and drinking for the week, to show the supervisor if asked.
- ☐ One activity each week that is not healing and is with people who are not patients.
- ☐ A week of leave at least twice a year, with no make-up call afterwards (Landon 2004) [OWNER].

Protocol B. The sign list for a healer who is failing

Any one of these means a private talk with the deputy or supervisor that week. Two or more means standing down for at least a week with cover [OWNER].

- ☐ Coldness, irritability or contempt towards patients, or avoiding certain families.
- ☐ Missed visits, late arrivals or unrecorded doses.
- ☐ Errors in the register, or a medicine count that does not match.
- ☐ Drinking more, or taking sedatives, opioids or stimulants from stock.
- ☐ Refusing rest or leave, insisting on working alone, or refusing to come to the peer meeting.
- ☐ Poor sleep for two weeks or more, or weight loss.
- ☐ Hiding or minimising a death or error at review.
- ☐ Talk of being useless, of having killed someone or of not wanting to go on. This last sign means following the suicide protocol in MI-08 the same day.

Protocol C. After an error or a death

- ☐ Within 24 hours, the healer tells the deputy or supervisor what happened, with the register.
- ☐ Within 72 hours, a confidential review with the deputy or supervisor. What happened, what was known at the time, what would be done differently. No blame in the room [OWNER on whether this can ever be used in a dispute].
- ☐ The family is told the truth, with the deputy present (Wu 2000).
- ☐ The death register is read to the council at its next meeting, giving cause and circumstances but not blame.
- ☐ The healer is offered a day off within the week.
- ☐ If the healer shows two or more signs from Protocol B, they are stood down with cover.
- ☐ No group debriefing on the day of the death. No compulsory retelling.
- ☐ At the next peer meeting, the case is discussed among healers.

Protocol D. What the village owes its healer

- ☐ Keep: food, fuel and labour on their fields while they work, set by the council [OWNER].
- ☐ A second healer or deputy, trained and kept in practice.
- ☐ A written rota, enforced by the council, not the healer.
- ☐ Public defence: a named council member who answers rumours and accusations.
- ☐ No public accusation after a death until the review has met [OWNER].
- ☐ Mourning leave of at least 7 days when the healer loses someone close, with a deputy covering, as MI-03 sets out (THRIVING library, MI-03) [OWNER].
- ☐ Access to the district peer group and supervisor, with travel time protected.
- ☐ The right to say no to a case beyond their skill, and to refer it, without blame.

Protocol E. Never one alone

- ☐ Two people trained to treat in every village. Two is the minimum.
- ☐ Two keys to opioids, sedatives and spirits, held by different people, one of whom is not the healer.
- ☐ A second person present at births, deaths and the dispensing of controlled medicines where possible.
- ☐ A second person reviews every death.
- ☐ A healer who is stood down is never left without a named replacement.
- ☐ A district reserve who can be sent within a day [VERIFY: feasibility depends on travel].

Numbers to carry

Number	What it means	Source
About 25 per cent	Burnout or depression among aid workers at any time	Cameron 2024
10 to 20 per cent	Depression before and after a hard deployment, and still 20 per cent months later	Cardozo 2012
3 to 77 per cent	Lay health worker attrition across programmes	Nkonki 2011
20 per cent a year	Alaska aide attrition in a mature programme	Landon 2004
36 per cent more	Serious errors on 24-hour shifts	Landrigan 2004
Odds ratio 3.3	Depression after a major error	West 2006
1.4 to 2.3 times	Physician suicide against the population	Schernhammer 2004
15 per cent	Surgeons with alcohol abuse or dependence	Oreskovich 2012
-0.45 against -0.18	Organisational against individual effect on burnout	Panagioti 2017
1 hour every 2 weeks	The peer group that cut depersonalisation	West 2014
72 riots	Cholera riots against doctors in Britain, 1831 to 1833	Cohn 2017
2	The minimum number of healers per village	Inference, FO-04

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