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ORIGINAL ARTICLE

Financial medicine as a source of moral distress: An unrecognised pathway to moral injury in the South African EMS systems

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ABSTRACT

Introduction: The phenomenon of Financial Medicine is a wide spread practice within the South African prehospital domain, which remains poorly researched. Similarly the impact of this phenomenon is not well understood, with many healthcare providers grappling with the moral dilemmas introduced into the work systems through the effects of the practice of Financial Medicine. Persisting, repetitive moral dilemmas can lead to instances of Moral Distress and Moral Injury. The practice of Financial Medicine in the South African prehospital domain proves to introduce many moral dilemmas and subsequently can serve as a source of Moral Distress and Moral Injury.

Methods: This study used a qualitative research methodology in the form of a constructivist grounded theory design. Participants voluntarily consented to be enrolled into one-on-one in-depth interviews, and were selected using purposive and theoretical sampling techniques. Data was subjected to validated coding procedures and analysed using the constant comparative analysis approach, analytical diagramming, and supported by researcher theoretical sensitivity.

Results: The sub-category presented in this study stems from the development of 6 final analytical labels that were abstracted in the process of a theory construction, not presented in this article. This sub-category is nested under 1 of the final analytical labels, and comprised of 3 preliminary analytical labels and an associated code and proposition list.

Conclusion: Understanding the sources of Moral Distress and Moral Injury within the South African prehospital domain are key steps in promoting and supporting the adoption and sustainability of ethical practices. This article presents a key finding that demonstrates a link between the experience of the phenomenon of Financial Medicine and the suffering of a Moral Injury by South African prehospital personnel.

Introduction

Problem formulation

The practice of Financial Medicine is a known phenomenon experienced within the South African healthcare system, and yet continues to be neglected as a research focus area within the local healthcare research priorities. Financial Medicine describes "*the delivery of a health-related service and or the performance of medical interventions where the generation of financial gain or profit is viewed as the central focus of the provider's activities and rather than the patient's wellbeing*" [1]. There have been some preliminary efforts to begin exploring the dimensions of the practice of Financial Medicine, however the paucity of research in this area continues to upend meaningful efforts to expose and address this growing moral threat and threat to morale to the South African healthcare work force [1]. While there are many aspects to this concept that remain formally unexplored, the occurrence and experience of the practice of Financial Medicine, and the multi-dimensional consequences of the practice of Financial Medicine continue to be felt within South African Healthcare systems, albeit in a mostly unarticulated fashion.

A unique domain of the South African Healthcare system, within which the palpable effects of Financial Medicine Practices are experienced, is the prehospital domain [1]. The prehospital domain continues to struggle with a number of persistent challenges that continue to threaten the ongoing professionalization of the sector [2]. Among these challenges is the ongoing poor retention of qualified prehospital staff,

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for which a myriad of suggestions have been offered [3].

What this article points to is a previously unrecognised influence that has yet to feature in the conversation that centres on the persistent high loss rates of South African prehospital providers. The phenomenon of Burnout features prominently in the conversations regarding poor retention of prehospital staff, being the subject of preliminary research efforts [4,5]. However, it would appear that Burnout is a symptom of an underlying cause, and as such can only really serve as a placeholder of the real problem to be addressed, as opposed to being the primary problem in and of itself.

There has been a recent surge in healthcare research focusing on the phenomenon of Moral Distress, Moral Injury and the consequences thereof, such that a steady connection has been drawn between the sustaining of a Moral Injury and the subsequent experience of Burnout and Post Traumatic Stress Disorder (PTSD) [6–9]. Evidence is suggesting that experiencing Moral Distress, often described practically as 'potentially morally injurious events' (PMIE) that when left unchecked progresses to Moral Injury, is an unrecognised pathway to Burnout, with some researchers indicating that healthcare providers are suffering Moral Injury and being misdiagnosed as having Burnout [7,8,10–12].

The distinction is an important one, as while Burnout and Moral Injury share a number of commonalities, ontologically these are two different maladies that require different approaches to remedy [10–12]. The practical significance would lie in seeking to understand effective ways to both manage and mitigate causative factors for each, with an important relationality expressed in the fact that unmanaged Moral Injury can, and often does, lead to Burnout, while Burnout can occur without having incurred a Moral Injury [10,11,13]. Here is a key link, given that within the South African prehospital space there is significant awareness and consideration for Burnout and the consequences thereof. In contrast, there has been no research to date that has considered the impacts of Moral Injury, the potential causes for Moral Injury and the possibility that the suffering of Moral Injury by prehospital providers is a primary driver for Burnout, or moreover is being misrepresented as an exegesis of Burnout.

Research purpose

While identifying and exploring the impact of Financial Medicine was not an aim of the initial study in which what was called a 'System of Caring' was developed, the researchers soon realised the significance of this specific finding and sought to explore and subsequently report the preliminary observations that were gleaned through the data gathering and analysis process [2]. For this reason the researchers are now presenting the perceptions and experiences of the research participants in the face of Financial Medicine Practices.

In this article key insights are shared regarding the perceptions and experiences of frontline prehospital care providers who are involved in, or bear witness to the practice of Financial Medicine and the role that these experiences have in leading to Moral Distress, and eventually Moral Injury. Exploring and understanding this may help to uncover possible drivers for poor prehospital provider's retention, as well as provide insight into the ever increasing rates of prehospital care provider Burnout.

Methods

Qualitative approach and research paradigm

The researchers set out to understand the relationship between ethical leadership and doing "Good Work", the latter being defined by Gardner et al. as being "work that is of excellent technical quality, work that is ethically pursued and socially responsible, and work that is engaging, enjoyable and feels good" [14,15]. The substantive findings of this research was the development of a conceptual leadership strategy, called the 'System of Caring' which has subsequently been published [2]. During the development of this conceptual theory, the researchers came across an incidental finding that did not directly form part of the conceptual theory, and is now being presented in this article. The study used a constructivist grounded theory research design, with the method of constant comparative analysis being adopted in the iterative, inductive data analysis process [16,17].

Researcher characteristics and reflexivity

The primary researcher is an Emergency Care Practitioner (ECP) who has been working in South African Emergency Medical Services (EMS) for over 10 years. An ECP holds a professional degree in emergency medical care and medical rescue, and functions as the top tier emergency care provider within the prehospital environment. The primary researcher has worked in both the private and public EMS sectors, as well as within the higher education sector. Being located within the South African prehospital system, the primary researcher has encountered Financial Medicine Practices, observing the impact these practices have had on colleagues and systems. The primary researcher has also experienced discriminatory and punitive retaliations in response to resisting and refusing to participate in Financial Medicine Practices of various forms. These experiences enable the primary researcher to invest significant subject matter knowledge and expertise into the data analysis procedure, which is instrumental in the constructivist grounded theory research approach [16,17].

Context

The research took place within the cities of Johannesburg and Mogale, involving prehospital providers from both public and private agencies, that voluntarily consented to participate.

Sampling strategy

A total of 10 participants were purposively sampled, and consented to voluntary one-on-one in-depth, audio recorded, interviews. Sampling was initially purposive, selecting individuals from diverse working environments. However, as data analysis progressed the method of theoretical sampling was utilised in response to the findings drawn out through the constant comparative analysis process [16–20].

Data collection methods, instruments and technologies

Interviews were facilitated through the use of a semi-structured interview protocol that was adaptive in response to the preliminary findings of the initial interviews as well as the responses shared by participants during the interviews [16,17,19,20]. Simultaneously, memo writing was employed which involved the researcher capturing observations, thoughts and reflections, which also served as a source of data [16,17]. This adaptive process was mediated through the application of theoretical sensitivity throughout the data gathering and data analysis processes, with this being significant as it provided researchers with the opportunity to both identify and explore in detail the experiences that participants shared in regard to Financial Medicine Practices.

Ethical issues pertaining to human subjects

Ethical clearance for research involving human participants was obtained from the St Augustine College of South Africa Research Ethics committee for the purpose of interviewing and audio recording research participants. Voluntary participation was supported through the use of an approved research information letter which was provided to the participants. Written consent was obtained from each participant to participate in an interview and be audio recorded. Data protection mechanisms were also employed throughout the research process, through encrypted files that were password protected.

Data analysis

Interviews were transcribed and subjected to accepted manual coding practices, whereby through three distinct phases of coding researchers were able to generate analytical labels, that were then grouped into 6 category labels and eventually themes [16–19]. Procedurally this was undertaken in conjunction with the ongoing process of constant comparative data analysis [16,17,21].

One of the six category labels named 'Surviving in EMS' contained a number of analytical labels relating to the practice of Financial Medicine, which were consequently nested under two sub-category labels that worked to capture the emergent meanings and connections associated with the experience of the practice of Financial Medicine. One of the sub-category labels reflected the apparent Moral Distress that participants were reporting in the face of experiencing the practice of Financial Medicine, either as a primary agent or witness to this type of practice. Of interest, the other sub-category label reflected the multidimensional nature of Financial Medicine Practices, however further discussion on this falls outside the scope of this article.

Techniques to enhance trustworthiness

Trustworthiness of this study was ensured through the application of the precepts of dependability, credibility, confirmability and transferability. The primary mechanism through which these precepts were achieved was the process of data triangulation [16–18]. Data triangulation was realised through specific, well-established practices including interviews, field notes, member checking, memo writing, and observation for data saturation throughout the data collection and data analysis process [22,23].

Results

Links to empirical data

Through the data analysis process and coding procedures, analytical labels were developed and grouped to formulate 6 category labels. The 6 category labels were subjected to further analysis and thematic labels were generated, which formed the basis for the theorisation of the 'System of Caring' [2].

However, in the focus of this article the researchers are specifically presenting the data analysis of the specific relevant category label, sub-category label and associated analytical labels for the purpose of demonstrating the observed impact that the experience of the practice of Financial Medicine has on South African prehospital provider. As previously indicated this was an incidental finding that researchers had not initially set out to explore, however with the ongoing emergence of the concept of "Financial Medicine" in participant responses researchers adapted the interview protocol to explore and make sense of these experiences. Below are some direct excerpts from interview transcripts that highlight how participants experienced the practice of Financial Medicine.

'Financial Medicine was something that even gave me a lot of stress, a lot of PTSD to an extent, and it's something that still bothers me because of how people will literally kill for money and how people will be avoiding patient treatment for money.'-Participant 2

'I came across a couple of smaller services on accidents, and they were purely driven giving that patient treatment that was maybe not warranted with the aim of getting the financial gain out of that. So you would have a lesser qualified person on a response car driving past to a call administering analgesic to a patient which might not have required that. You know just to get that patient that you can bill them at a high level.'- Participant 3

'I once worked with [Redacted]…they're very money driven so even when somebody didn't need pain medication like morphine, he would convince people that they do need it because they can bill people for that… For me that's not ethical. You can't give somebody something for money which they don't need. For me it's totally wrong'- Participant 4

'It's you're not good enough for this treatment. You're not worthy enough. Oh you don't have medical aid. You'll have to wait for government. But I asked for an ambulance. It's in the patient's right's charter to get access to emergency services. But you will wait to get an ambulance…I feel like we go quickly to those calls where we know that it's just a money thing. That's coming from experience now'- Participant 7

'Every single company I think I've been to is Financial Medicine…It's just, it's wrong. If you're complaining of a sore – arm and leg. Because you're involved in an MVA [multi vehicle accident] and the airbag hit you. You check the ECG and everything's fine, and the impact wasn't that severe. You had your seatbelt on, the airbags went off. You've got a bit of blue marks, but check everything, everything's fine. Now you're, I'm saying okay listen I'm going to put up a drip just in case anything goes wrong. Why, what is the purpose of that? Because they say you need to make more ILS [intermediate life support] cases to bring in money. I'm like no. It's not indicated, it's not necessary…'- Participant 9

In order to organise and make sense of the observations relating to Financial Medicine Practices the researchers flagged codes and labels that emanated from the raw data portions that were shared in relation to specific experiences of the participants in relation to the practice of Financial Medicine. In this way the researchers were able to make the connection between the practice of Financial Medicine and the sustaining of Moral Injury. The table below displays the various stages of data analysis as related to making meaning of the participant's experience of Financial Medicine Practices.

Interpreting the observable connections

As demonstrated in Table 1 above, the process of induction enabled

Table 1
This table displays the data sets directly related to the experience of Financial Medicine, leading to the development of the sub-category label related to Financial Medicine and Moral Distress.

Focused Coding List	Proposition Formulation	Analytical Labels	Sub-Category label (In Part)
• Bending the truth • Opposing self • Moral Injury • Demoralising • Finding loopholes • Challenging through changing • Normalising • Pay-checking • Money hunting • Compromising ethics • Wrong doing • Killing for money • Financial Medicine values • Chasing money • Work system evasion • Degrading	EMS workforce synonymise working in EMS with 'having to compromise' objective and subjective ethical standards in order to cope with the work. This leads to an inner conflict (and conformational changes) which are recognised and resented, leading to a divided workforce that conflict into and beyond Burnout. The Moral Injury results from failing in irreconcilable differences where choices are dictated by survival and not by morality.	Making immoral choices to survive. Experiencing inner conflict and resentment leading to Burnout. Having to compromise objective and subjective ethical standards to cope.	*'Work force are compromising traditional personal and EMS specific values in order to function in a changing work system resulting in deep moral injuries'*

the researchers to make the connection that the practice of Financial Medicine was exposing prehospital providers to ethical challenges and ethical dilemmas in a system that simultaneously constrained these providers' capacity to exercise autonomous moral agency. Subsequently the participants were forced into situations and decisions that proved to be a source of significant Moral Distress. Furthermore, the apparent frequent re-occurrence of these experiences described by the participants supports the notion that Financial Medicine Practices serve as a fertile ground for suffering a Moral Injury. Participants frequently expressed emotive statements, in relation to Financial Medicine Practices, that conveyed regret, anger, disgust and distress. These sentiments converge into the widely held belief amongst prehospital staff that to survive in EMS one has to be willing to compromise on deeply held moral values and convictions. The compromise revolves around the tension between financial interests and patient centric healthcare priorities.

Discussion

The experiences shared by the participants demonstrated a work system that is fraught with many instances that present ethical challenges. An ethical challenge can be described as *'any situation where there is doubt, uncertainty or disagreement about what is morally good or right'*, and when this occurs in a healthcare system where the individual provider is unable to exercise moral agency to resolve these challenges, the provider can experience Moral Distress [13,24]. Moral Distress can be defined '*as one or more negative self-directed emotions or attitudes that arise in response to one's perceived involvement in a situation that one perceives to be morally undesirable'* [25]. Understanding the dimensions of Moral Distress are important to understanding the extent of the threat that is posed by Financial Medicine Practices to the South African prehospital provider. Below, one of the participants describes the tension that exists between financial interests and patient centric healthcare priorities, and the difficulty in navigating this in the clinical environment.

> *'Yes. Because at the same time I understand it's a private company, it needs to still survive but not to the detriment of a patient, unfortunately, that's what I feel and like burdening someone with a very heavy bill when they needed your help is not helping someone at all. Because that is a burden, they will blacklist you. We're choosing to take someone who is insured because they're got a stomachache. It makes me angry… Dishonesty which is, goes against everything but I kind of make myself feel better because I'm like I would want someone to do this for me. I can't afford a R9000 bill, he's fractured his femur. I'm not going to not give him pain medication and he needs to get to hospital, so he needs a [redacted] ambulance.'*-Participant 7

An important dimension of Moral Distress is the inner conflict that the individual provider experiences when faced with a moral dilemma where there is no clear positive moral choice, particularly in the practical sense. Such inner conflict results in a deluge of negative self-directed emotions in an environment that offers no real means to change the choices at hand [10,13,25]. When considering the impact that the experiences, as shared by the participants, had on the participants themselves, the researchers were confronted by an array of intense emotions. In many instances participants communicated emotions of pain, sadness, regret and anger in the recounting of these experiences relating to witnessing or participating in Financial Medicine Practices. Prehospital providers are stuck in work systems where Financial Medicine Practices force the provider to pick between participating in the financial medicine practices for the sake of job security, or resist Financial Medicine Practices, in order to protect the patient, at the expense of their job security. This dilemma is described by one participant below.

> '*You question your own ethics. You either do, you take the moral high ground* but then you end up with punctures every *day in your tyres or if you can't beat them you join them and you end up suffering a lot less. The sad thing is for a long time I pushed to get my 20 patients every month. I pushed. There was times where I actually tried… So if you do well and bring in more for the company, you do well by getting more from them. They're keeping you happy as long as you're doing well.'*- Participant 2

These experiences have attributes that align with the definition of experiences that lead to Moral Distress [11,25,26]. This is a significant observation, given that several studies have described the deleterious effects that experiencing frequent Moral Distress, has on the mental health and wellness of emergency care personnel [6,10–12]. Extending from this is the very real threat of the progression from Moral Distress to Moral Injury, which can be defined as *"an act of transgression that creates dissonance and conflict because it violates assumptions and beliefs about right and wrong and personal goodness…"* [27]. While there is some philosophical disagreement on the sufficiency of this definition offered by Koenig and Al Zaben [8], the essence conveyed by Litz et al. is sufficient to understand what has been shared by the participants. Based on the experiences shared by the participants and associated observations, the researchers assert that Financial Medicine Practices are a source of Moral Distress, in the first instance, and subsequently a source of Moral Injury. An example of one such experience is described below.

> *'Something else also that bothers me, that same company, I worked as a student for them for a year. An elderly gentleman fell in the shower and broke his arm and [redacted] did the call and then having everything ready and then management will phone and ask, ask the patient does he have a medical aid. And that patient says no, then you can't do nothing for the patient. Just pack up your stuff and go and abandon the patient then because he can't pay your service.'*-Participant 4

This is concerning given the relationship that has been demonstrated between Moral Injury and individual Burnout within the healthcare workface, with studies demonstrating that prehospital providers are especially vulnerable to this progression [6,8,10,11]. As previously mentioned the relationship between Moral Injury and Burnout is not a linear or exclusive one, however the link is undeniable: providers suffering from Moral Injury are more likely to experience Burnout [6–9]. Intimations toward the relationship between Financial Medicine Practices and Moral Distress have been observed in other settings, highlighting the implicit need for research focusing on establishing the role of Financial Medicine Practices in causing Moral Injury in prehospital providers [9,26]. In fact Dean et al. have indicated that a root cause for Moral Injury *is the health care system that has prioritised profits over healing* [28]. When comparing the findings of this research with the sentiment expressed above, we are able to draw a reasonable comparison between these processes and the process embedded in the practice of Financial Medicine within the South African prehospital space. Below is a participant account that describes an example where profits are prioritised at the patient's expense.

> *'This is where things go wrong where patients could have had a bill of say R2000, just as comfortable as when you took and charged him R8000, because you put up an IV and you gave medication just because you wanted that finances, this is very unethical. I've not seen it but there are many stories of patients being denied treatment or receiving for a prolonged period of time because they are waiting for another service provider where transport is immediately available by another service. Things like that, this is very unethical so there are some services where they appoint the guys on a very small basic salary. The difference must be made up with patient numbers, and this is a very bad approach to patients'*- Participant 3

While the impact on the quality of patient care appears to be more obvious, we suggest that this pattern of behaviour, and resulting consequences, could hold some key insights into the ongoing national crisis associated with retaining South African prehospital care providers within the local workforce. The conversion of Moral Distress into Moral

Injury is significant as this represents a turning point in an individual's resilience and coping mechanisms such that the deleterious effects of the experience predominate the modulation of the individuals mentality and interior attitude, leading to a conformational change in the individuals moral attitude, which is primarily outwardly manifested in or as a change in their professional identify and subsequent professional practice [2,12]. The phenomenon of the South African healthcare system losing skilled healthcare providers is a widely known issue challenging the prosperity and proper functioning of South African society across many domains, with there being very real implications felt with in the South African prehospital domain, primarily in the ongoing loss of graduate professionals. There has been some investigation into the drivers of this phenomenon, however this has not led to the development of effective retention strategies [3].

While this research study cannot quantify the extent of the impact that Financial Medicine Practices have on South African prehospital staff retention, the researchers do assert that there appears to be a connection between prehospital staff experiencing Financial Medicine Practices and sustaining Moral Injury. This connection is significant given that there is a clear link between Moral Injury and Burnout [6–9]. The significance of this is tied to the rate of Burnout amongst South African prehospital staff, which has been shown to be significantly higher than the international average rates, and has been suggested as a factor in the poor workforce retention within the South African prehospital setting [3,5]. This requires further investigation and the researchers are hoping that by sharing these findings, other researchers will be encouraged to further explore and make meaning of the phenomena of Financial Medicine Practices.

Conclusion

When reviewing current understanding around the concept of Moral Distress, a key property of this state of being is that when an event that causes Moral Distress becomes a recurring event, or remains unmitigated it will progress into becoming a Moral Injury. Healthcare providers suffering from Moral Injury are at higher risk of suffering Burnout or being miss-diagnosed as having Burnout, leaving the Moral Injury unrecognised and unmanaged. The consequences of this connection between Moral Distress, Moral Injury and Burnout are significant for the South African prehospital healthcare system and demand further formal research enquiry. Moreover, there is the urgent need to fully explore and understand the interplay between the Financial Medicine Practices and Moral Distress, Moral Injury and Burnout.

Limitation

The authors had not set out to investigate this phenomenon, but rather came across the body of experiences and connected observations that have been presented in this article as an incidental finding of the research process. As a result of this the authors assert that this paper serves as a starting point in an important conversation to shed light on an area that warrants significant additional scientific enquiry.

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Conflicts of interest

The authors have no conflict of interests to declare.

Dissemination of results

The original thesis, from which this publication was drawn, has been made available on request to the study participants. A copy of the thesis has been placed in the academic library at St Augustine College of South Africa. The authors are committed to publishing these results in open access journals.

Authors' contribution

Authors contributed as follow to the conception or design of the work; the acquisition, analysis, or interpretation of data for the work; and drafting the work or revising it critically for important intellectual content: CGM 90%, JPK 10%. All authors approved the version to be published and agreed to be accountable for all aspects of the work.

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