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Full Length Article

Paramedics' experiences of financial medicine practices in the pre-hospital environment. A pilot study



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ABSTRACT

Background: The term “financial medicine” refers to the delivery of health-related services where the generation of financial gain or “profit” takes precedence over the provision of care that is reflective of evidence-based best practice. The practicing of financial medicine includes over-servicing and overbilling, both of which have led to a sharp rise in the cost of health care and medical insurance in South Africa. For this reason, the practicing of financial medicine has been widely condemned both internationally and locally by the Health Professions Council of South Africa (HPCSA) and allied Professional bodies.

Objectives: This qualitative pilot study explored and described the experiences of South African Paramedics with regard to the practicing of financial medicine in the local pre-hospital emergency care environment.

Method: A sample of South African Paramedics were interviewed either face-to-face or telephonically. The interviews were audio recorded and transcripts produced. Content analysis was conducted to explore, document and describe the participants' experiences with regard to financial medicine practices in the local pre-hospital environment.

Results: It emerged that all of the participants had experienced a number of financial medicine practices and associated unethical conduct. Examples included Over-servicing, Selective Patient Treatment, Fraudulent Billing Practices, Eliciting of kickbacks, incentives or benefits and Deliberate Time Wasting.

Conclusion: The results of this study are concerning as the actions of service providers described by the participants constitute gross violations of the ethical and professional guidelines for health care professionals. The authors recommend additional studies be conducted to further explore these findings and to establish the reasons for, and ways of, limiting financial medicine practices in the South African emergency care environment.

O P S O M M I N G

Agtergrond: Die term “finansieële medisyne” verwys na die lewering van gesondheids-
verwante dienste waar die skep van finansieële gewin voorkeur geniet bo die lewering

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van sorg soos vereis word deur bewys gebaseerde praktyk. Die be-oefening van finansiële medisyne sluit oor-verskaffing van dienste en oor-fakturerings in, wat beide lei tot 'n skerp styging in gesondheidsorg kostes en mediese versekering in Suid Afrika. As gevolg van hierdie rede word die be-oefening van finansiële medisyne wyd gekritiseer, beide internasionaal en nasionaal deur die "Health Professions Council of South Africa (HPCSA)" en verwante professionele rade.

Doel: Hierdie ondersoekende studie poog om die ondervindinge van Suid Afrikaanse Paramedisie te verken en te beskryf met betrekking tot die gebruik van finansiële medisyne in die plaaslike pre hospitalisasie noodgeval omgewing.

Metode: Ses Suid Afrikaanse Paramedisie is ondervra om hul ondervindings te ondersoek, te dokumenteer en te beskryf met betrekking tot die praktyk van finansiële medisyne in die plaaslike voor-hospitaal omgewing.

Resultate: Dit blyk dat al die deelnemers 'n aantal finansiële medisyne praktyke ervaar het asook geassosieerde onetiese gedrag. Voorbeelde sluit in: oor-dienslewering; selektiewe pasiënt behandeling, bedrog ten opsigte van eise, aanduiding van onwettige winsbetaling of winsdeling, aansporing of voordele en doelbewuste mors van tyd.

Gevolgtrekking: Die uitslag van hierdie studie is kommerwekkend omdat die aksies van die diensverskaffers soos beskryf is deur die deelnemers dui op growwe oortredings van die etiese en professionele riglyne vir die professie. Die outeur beveel verdere addisionele studies aan vir uitbreiding van hierdie bevindinge en om die redes vir en maniere van finansiële medisyne praktyke in die plaaslike noodsoorg professie te beperk.

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1. Introduction

Practice as a health care professional is premised upon a relationship of mutual trust between patients and health care practitioners. In essence, practice as a health care professional is a moral enterprise (HPCSA 2007).

The Health Professions Council of South Africa (HPCSA) requires registered persons to consistently act in the best interests of their patients (HPCSA 2007). Ethical guidelines of the HPCSA highlight the importance of practitioners avoiding potential conflicts of interest by maintaining professional autonomy and independence (HPCSA 2007). The ability and desire to generate profit is naturally central to the activities of private health care providers, for without this they would be unable to exist. The very concept of making money from ill or injured persons when they are at their most vulnerable continues to pose a philosophical ethical dilemma. Registered professionals employed in the private health sector may therefore at times experience moral dilemmas and potential conflicts of interest. Some of these are brought about by incentives or forms of inducement that threaten their autonomy, independence or commitment to professional conduct which should place the patients' needs ahead of the expectation to generate profit.

In the context of this article, the term "Financial Medicine" is used to refer to 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.

The practising of financial medicine may include a number of potentially unethical actions with "Over-servicing" being one. Over servicing involves the provision of unnecessary treatments and or procedures, either diagnostic and or curative, which are not informed by recognised treatment protocols. Those engaged in over-servicing more often than not fail to take into account the financial and health interests of the patient (HPCSA, 2007).

2. Background

In the local pre-hospital emergency care environment, patients are billed according to the level of care they have received. Levels of care are divided into three broad categories. These are Basic Life Support (BLS), Intermediate life Support (ILS) or Advanced Life Support (ALS).

The Basic Life Support scope of practice includes mostly simple non-invasive interventions, such as spinal immobilization; administration of oxygen, entonox, and oral glucose; basic wound care and splinting fractures (Professional Board for Emergency Care 2006a).

Intermediate Life Support (ILS) sees the introduction of a couple of additional procedures, such as the siting of IV lines; needle thoracentesis; needle cricothyrotomy; use of a 3-lead ECG; defibrillation and administration of selected drugs such as dextrose, beta 2 stimulants, ipratropium bromide and aspirin (Professional Board for Emergency Care 2006b).

Advanced Life Support (ALS) includes advanced airway management (oral tracheal intubation, nasal tracheal

intubation, supraglottic airway placement and surgical cricothyrotomy). In addition, there are a number of emergency medications that may be administered by ALS providers (Professional Board for Emergency Care 2006c).

The cost of each category of service provided varies with BLS being the least expensive followed by ILS and then ALS. This system of costing appears to be open to abuse. Anecdotal reports by members of the profession have highlighted circumstances, situations and practices whereby patients who only require a BLS level of care end up receiving unnecessary ILS or ALS procedures or interventions for the sole purpose of elevating the category of service provided thereby allowing the service provider to bill at a higher rate.

Furthermore, informal conversations with members of the profession appear to support claims that certain private EMS providers in South Africa have been setting their operational paramedics “targets” or “quotas” that require them to see a minimum set number of ALS patients each month. Naturally, those patients who have medical insurance are most sought after, for recovery of costs from indigent patients who do not have the financial means to pay for transportation and care becomes difficult. Due to the nature of the emergency care industry, accurately predicting the nature and volume of calls is difficult, therefore the achievement of set targets and quotas becomes a challenge. The pressure to meet targets has allegedly lead certain paramedics to unnecessarily “upgrade” their patients’ priority and associated level of care provided for purposes of reporting and billing.

Whilst the above examples describe practices which are clearly ethical, undesirable and unprofessional, much of the above could rightfully be considered untested, anecdotal and undocumented hearsay. For this reason it was decided to conduct an exploratory pilot study to formally investigate, explore and documenting the experiences (if any) of South African Paramedics with regard to *financial medicine* practices of emergency service providers.

3. Research design and methodology

3.1. Aim

This pilot study describes the experiences of South African Paramedics with regard to the practicing of financial medicine in the local pre-hospital emergency care environment.

3.2. Design

A prospective qualitative design was used. In qualitative research, the researcher collects information from people who are most knowledgeable about the situation or culture, commonly referred to as ‘key informants’. (Higginbottom, Pillay, & Boadu, 2013). In this study the key informants were the paramedic participants who agreed to be interviewed.

3.3. Data collection

Six purposefully selected South African Advanced Life Support paramedics were interviewed in order to explore, document and describe their experiences with regard to financial

medicine practices in the pre-hospital environment. Following ethical approval, participants who had consented to being interviewed were contacted either via email or telephone and an appropriate date, time and place was decided upon where the interview could take place. To ensure participants could freely express themselves one-on-one interviews were conducted either by telephone or via face-to-face meetings. The interviews were audio recorded and then transcribed. Reflective field notes were also taken during and after each interview. The interviews began with a single open question “Can you share with me any experiences you have had with regard to the practicing of financial medicine in the emergency care environment”. Each participant then had the opportunity to describe and discuss their experiences; follow-on probing questions were asked as appropriate. Six interviews were conducted, two were done face-to-face and four were done telephonically. The face-to-face interviews were conducted at the University of Johannesburg, privacy and anonymity was upheld at all times.

3.4. Data analysis

Transcripts from the interviews were read through thoroughly line by line. Through simple content analysis the emerging experiences, ideas and concepts linked to the central aims and objectives of the study were documented. By end of the sixth interview data saturation occurred and no new experiences, ideas or concepts were seen to be emerging. Following this documented experiences and ideas stemming from each of the interviews were coded allowing them to be grouped together to derive eight common themes and ideas central to the study (Chenail, 2012).

3.5. Trustworthiness

Rigour of research was ensured by applying measures to ensure trustworthiness such as strategies of credibility, transferability, dependability and confirmability (De Vos, Strydom, Fouche & Delpoit, 2011: 142–143). Credibility was ensured by the researcher’s prolonged engagement with the field, triangulation of research methods, peer evaluation and in-depth interviews. Transferability was ensured by providing an in depth description of the demographics of the participants and a rich description of the results with supporting direct quotations of the participants. Dependability was ensured by a dense description of the research methodology, code-recode procedure and step-wise replication of the interviews. Confirmability was ensured in that the interviews were audio recorded and transcripts produced which were electronically stored with field notes thereby providing a chain of evidence in the research process.

3.6. Ethical considerations

Ethical approval for the study was granted by the higher degrees and ethics committee of the University of Johannesburg. Rights to privacy, self-determination, personal liberty and natural justice are of particular importance when conducting research involving human participants. As such, there is a responsibility to follow procedures for valid consent,

confidentiality, anonymity, fair treatment and due process that is consistent with those rights (Brikci & Green, 2007). For this reason, service providers and individuals are not named. All participants were informed about the background, purpose and aim of the study beforehand and each had the right to decide whether or not to participate and or to withdraw at any time without any repercussions.

3.7. Findings

Analysis of the participants responses lead to the identification of the following themes and ideas:

- a) The “Upgrading” of calls through the performance of unnecessary medical interventions
- b) Pressure to meet set Quota's and Targets
- c) Selective Treatment and Patient Care
- d) Unprofessional Competitive Conduct
- e) Incorrect Billing
- f) Overloading of ambulances
- g) Unethical kickbacks, benefits or perverse incentives
- h) Deliberate Time Wasting

Each of the above themes and findings are described in more detail below.

3.7.1. The “Upgrading” of calls through the performance of unnecessary medical interventions

Of the six participants interviewed, five had experienced a number of situations where calls were falsely “upgraded”. By “upgraded” the researcher means that the patient is deliberately “over-treated”. In the context of this study “over-treatment” refers to instances where patients receive care and or medical interventions which are not clinically indicated. Participant's responses highlight that unnecessary medical procedures and interventions are being initiated for the sole purpose of upgrading the category of the call i.e. from Basic to either Intermediate or Advanced Life Support, or from Intermediate to Advanced Life Support (ALS). Much of this upgrading seems to be achieved through the unnecessary placement of an IV line for patients who only required a Basic Life Support (BLS) level of care. This is because the simple act of IV cannulation immediately changes the category of the call from Basic to Intermediate Life Support (ILS) allowing the service provider to bill at the higher rate.

“... it would be upgraded to ILS, ALS, um whether it's an IV line, or something being given and when you know it's not an ALS call, and there is an IV inserted on the patient just for the fun of it..”

“..you go to hospital, find the patient's got an IV line up, got Morphine on board, and you've given them strict instructions to tell them there's nothing wrong with the patient..”

Similarly, in order to upgrade the category of the call to the ALS level a drug such as Morphine (only available on ALS protocol) would be unnecessarily administered.

“..So you land up over-treating patients, so patients that don't necessarily need morphine, you're giving them too..”

“... nothing else was wrong with them and they would get 15 mg of morphine just to make it an ALS call”

“... I.V. lines were sited or miniscule amounts of morphine were given to patients to escalate the call from either a BLS call to a ILS, or an ILS call to an ALS call”

3.7.2. Pressure to meet set quota's and targets

For private EMS service providers to cover costs and make a profit a minimum call volume or case load is required. It would appear that certain private EMS service providers are setting their operational paramedics targets or quota's relating to nature and number of calls they service each month.

These targets appear to put their paramedics under pressure and they are thus more inclined to try and “upgrade” calls in order to achieve their set targets.

“... what they have for their BLS providers, ILS Providers, and ALS Providers, is they have a certain quota or statistic that they must meet per month ... there was a lot of, um, pressure from the area manager to get those statistics per month”

“... an ALS have to perform 15 ALS, 15 billable ALS procedures per month..”

One participant actually went so far as to mention that due to pressure from their employer they had become personally been involved in financial medicine practices, this had in turn lead to feelings of shame and negativity.

“... it made me very negative and conflicted ... I was practising medicine I didn't believe in, and that's not why I got into this industry”

3.7.3. Selective Treatment and Patient Care

Participants indicate that private patients who have medical insurance are being treated differently from public or indigent patients who are not on a medical aid. A form of selective care or triage appears to be occurring at the scene of particularly motor vehicle accidents based on the presence of a medical aid.

“on motor vehicle accidents when there's multiple patient's, there's a selective category of literally who's on medical aid, who's not ...”

It appears that patients who have no medical aid are either ignored completely in preference for private patients, or they are under-treated to limit the potential loss of income should they be unable to pay.

“... patients that are not on medical aid and that will be under treated; they don't really receive what they're supposed too”

Services providers often do not know until they arrive on scene if the victims of a motor vehicle accident are on a medical aid or not. It seems that in cases where two or more private ambulance service arrive at the same incident both

will attempt to avoid having to transport the patients who do not have medical insurance.

“... between the private services, there was a lot of um competition, in the fact that, you know smaller service would get to a scene, and say well “you know what this patient doesn't have medical aid so we're not gonna bill them so you can transport them.”

In addition to the above, a number of questionable competitive practices were mentioned linked to service providers' desires to canvas medical aid patients from accident scenes.

These include using a tow truck to arrive on scene first to “Scan” for billable (medical aid) patients and then “Claiming” these patients. The way this apparently works is that a vehicle (sometimes a tow-truck) with a Basic Life Support provider on board is sent to scout out accident scenes and find out if any of the patients on scene are on a medical aid. Based on this information decisions are being made relating to further response and/or interventions.

“ they send a car through and assess the patients ... the purpose of this vehicle is if you have medical aid then we'll send our ambulance, if you don't then ok we'll stay here and treat and wait for another ambulance service”

“... where a tow truck driver would phone them after scanning if the patient is on medical aid or not and if they don't [have medical aid] then they withhold the call ...”

“They quickly scout for the medical aid patients, if there is no medical aid patients they stand the vehicle, the ambulances down.”

3.7.4. Unprofessional Competitive Conduct

Multiple service providers all operating in the same area competing for calls appears to be leading to incidents of unprofessional conduct and conflict particularly at accident scenes. Participants indicate that there are times when an ambulance may already be on scene, ready and available to transport the injured party. However the ambulance is not from the service the first responder works for they refuse to allow the patient to be loaded and transported. Patients are therefore unnecessarily being delayed at the scene of the incident until an ambulance from the first responders' service arrives.

“... we'll arrive on scene they would say: “this is my patient”; “ok great no problem but we have an ambulance here so we're gonna take the patient” “No, no you're not allowed too”; and that's what happens..”

“... it's literally almost like tag, it's like who can run around with the BP cuff or spine board or something and [claim patients]..”

“... you physically see people pulling each other off patients”?

“I've actually seen patients stolen out of other services ambulances”

3.7.5. Incorrect Billing

Several of the participants shared experiences relating to deliberate incorrect or inappropriate billing. These included billing at a higher category than the call was actually serviced. For example a patient received no medical interventions aside from BLS assessment and monitoring and yet they end up being billed for an ILS call.

“... charged, for example ILS rates, yet the service that is rendered is a basic life support level.”

Another theme that emerged was the fraudulent use of another ALS paramedic's name and HPCSA registration number on patient care records and associated paperwork to bill at an ALS rate yet this paramedic was never on scene, did not treat the patient and in some instances do not even work for the service provider concerned.

“And some of these services don't even have advanced life support, where they would utilise someone's details who is not even in their services”

The contracting of service providers to provide medical cover (standby) at sports events and other mass gatherings is common. Inability and ignorance of event organisers to properly differentiate between levels of pre-hospital qualifications, care and associated equipment provision appears to be creating an opportunity for certain service providers to bill them at an ALS rate whilst in reality they only provide personnel and/or equipment for a BLS level of care.

“Working at an events company, where they started off as a contract ... So, the contract would stipulate ALS, and they have a BLS working for the day..”

3.7.6. Overloading of ambulances

Participants described situations where multiple patients are crammed into a single ambulance each patient being billed for levels of care that would have been physically impossible to provide considering the number of crew and limited space.

“So they're billing the medical aid and then they're transporting 5, 6, 7, 8 patients in an ambulance and they're billing for 8 patients”

“... you arrive on a scene and another company has arrived before and they've literally loaded 10 or 15 patients into the back of an ambulance”

“ They've stacked all of them like little sardines inside the ambulance just to claim all the medical aid ...”

3.7.7. Unethical kickbacks, benefits or perverse incentives

A number of potentially questionable practices relating to “arrangements” between ambulance services call centres and other parties for purposes of canvassing were mentioned.

“... arrangements are made behind the scenes to benefit one service over another service ... people are chasing calls and people are actually paying people to scan the radios to receive the calls ...”

“... it's not just the control room, um I would put it onto private, provincial services, all the services, whether it be from a tow truck an undertaker or phoning their friends, um there's services out there where a tow truck driver would phone them after scanning if the patient is on medical aid or not “

One participant explained how they had seen incidences where private service providers have been contracted to perform ALS transfers of critically ill patients from one medical facility to the next despite the fact that they do not have any staff ALS to do the call. What apparently happens in this situation is that another ALS paramedic working for the public service is contacted to accompany the patient although he is on duty.

“So they're working for [name of public service removed] they're being paid full time salary and then a private company phones and you know says “ag just, you're on shift bring the response car (and) do the transfer for us quickly, we'll give you a thousand rand cash”. Because they're getting 5, 6 grand cash for the transfer, and the ALS don't mind cause it's a little more extra cash on their side”

3.7.8. Deliberate Time Wasting

Aside from level of care or category of call, patients are also billed according to the duration of time that they were in the care of the service provider. This time starts on arrival at scene and continues until the patient is handed over to the hospital staff at the receiving facility. It would seem that time wasting practises are being instituted by some service providers in order to inflate the amount that can be billed.

“... we're saying to the guys you're wasting time on scene, cause time is money ... they bill per hour”

“we're taking a 5 minute call [on scene time and then driving to hospital] to a 25–30 minute call.”

4. Discussion

Financial Medicine practises have little benefit for the patient, and rather only serve to benefit the service provider (Biller-Adorno & Lee, 2013; Clemens & Gottlieb, 2012). Having said this there is little published literature describing such financial medicine practices within the South African pre-hospital emergency care environment. Although ethical purists may claim that generation of profit from the misfortunes of others may be unpalatable, in the real world the ability to generate profit is central to the continued operation of any private enterprise including ambulance services. For this reason, those engaging in private health care should not be unfairly criticised or judged for attempting to make a profit. It is also

common knowledge that the current health needs of the South African population cannot be adequately catered for by our existing public health care system alone. This is especially true in the local pre-hospital emergency care environment where without the involvement of the ever expanding private sector many ill or injured patients would not be timeously attended to. A number of private ambulance services in South Africa have a good history of social consciences and continue to provide high levels of care to public and private patients alike despite the fact that they often have to write off associated costs which cannot be recovered. Having said this, the results of this study are concerning as many of the actions of service providers and their registered practitioners as described by the participants clearly constitute gross violations of the ethical and professional guidelines for registered health care professionals. A deeper understanding needs to be developed about why financial medicine practices are occurring and why they continue to go unchallenged.

5. Implications

The cost of medical insurance and private health care in South Africa continues to be a concern for the national department of health and the practicing of financial medicine is one of the factors driving this increase. What little legislation there is relating to the establishment and operation of ambulance services in South Africa is clearly not being properly policed and enforced. Whilst other countries have a system where licences to operate are restricted to a single service provider per population and or geographical area, in South Africa it seems to be a complete “free for all” at the moment.

Although the HPCSA provide guidelines for ethical practice, some of which speak directly to matters of over servicing and perverse incentives (HPCSA 2007), the results of this pilot study appear to indicate that these guidelines are not being followed.

The emergency care profession as a whole are also in part responsible for the continuation of financial medicine practices which serve to cheapen the name and good standing of the profession. This being the case it remains unclear at this point why it is that the unethical actions of registered persons, as described by the participants in this study, continue to go unreported to the HPCSA.

6. Limitations

One limitation was that prior to this study there was a lack of previously published local literature on this topic.

7. Recommendations

Going forward statutory bodies, regulators and administrators need to take note of the findings of this study and consider ways of better regulating and policing the private ambulance sector in South Africa in order to better protect the public from financial medicine practices. This pilot study needs to be followed by further research focused to determine if any other

financial medicine practises are occurring and also to try and quantitatively determine the prevalence and impact of the practices described in this pilot study.

Significance of work

This work is the first to describe financial medicine practices that appear to be prevalent within the local pre-hospital emergency care industry. Documenting and describing such practices serves as an important starting point in attempting to reduce the incidence of unprofessional and unethical conduct. An article such as this serves to draw the attention of not only health care professionals but also managers, decision makers and regulators to the fact that financial medicine is being practiced on the unsuspecting public.

Author's contributions

Craig Vincent-Lambert was the project leader, research supervisor and wrote this article. Richard-Kyle Jackson was a student at the time, conducted the interviews and submitted the initial report upon which this article is based.

Ethical considerations

Ethical clearance for this study was granted by the University of Johannesburg's Faculty of Health Sciences Academic Ethics Committee.

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