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CHAPTER 5

Towards a better understanding of harmful alternative health practices: a provider typology

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Abstract

This chapter discusses the opportunity to differentiate providers of harmful non-science-based health practices into different criminological types[1] by drawing on a subset of case studies identified in the United Kingdom through media, judicial documents, and grey literature. We propose a multi-dimensional typology addressing motivations, individual characteristics, behavioural patterns, criminal trajectories, and organisational structures. The typology presented furthers our understanding of harmful health practitioners and could serve as a framework to filter the different experiences of similar dangerous practices in other countries, thus facilitating comparative research.

Introduction

The promotion of fraudulent, dangerous, or useless medical treatments is not something new: the figure of the snake-oil salesmen who sells false cures to the masses is centuries old, and in recent times it is well-documented how certain individuals pray on the fears and frustrations (when the official medicine seems unable to find a cure) of the general public to promote 'quackeries' (Bashford 1911; Lerner 1984; Offit 2013; Lavorgna and Di Ronco 2017, 2018). The commercialisation of the internet and its increasingly ubiquitous presence in our lives have opened a whole new range of opportunities for fraudsters and self-proclaimed 'experts' to disseminate erroneous and potentially dangerous health-related information, and to reach for potential new costumers or followers (Holmes et al. 2017; Lavorgna and Di Ronco 2017; Delgado-López and Corrales-García 2018; Lavorgna and Sugiura 2018).

So-called quackeries are not only relevant in terms of consumer protection from financial harms; they can cause severe emotive, psychological, and health harms, and even result in the death of vulnerable individuals. Suffice it to remember how many fake treatments are directed to people suffering from cancer: as already noted by Lerner (1984), a lack of confidence in the public institutions and the public panic towards 'the big C' creates a fertile soil for unorthodox alternatives to surgery, radiation, and chemotherapy (described in the 'quacks'' jargon as mutilation, burning, and poisoning). Furthermore, the promotion of these fake 'alternative' treatments impairs the trust in the scientific method and, more generally, in the medical therapeutics, causing potentially long-term societal harms (Lavorgna and Di Ronco 2017)

In the academic literature, there are limited studies on providers of harmful non-science based health practices. As we will see in the following section, existing research suggests that these under-investigated providers should not be considered as part of a homogeneous group: many seem to be knowingly misleading their patients, for what we can suppose are a range of diverse motivations, while others seem to believe in what they do and say. This chapter will propose a

[1] We use the term 'criminological types' here instead of the term 'offender typology' because some of the providers of harmful non-science-based health practices discussed in this chapter will not have been identified as an offender by the criminal justice system.

multi-dimensional criminological typology of providers of harmful alternative health practices, which we hope can serve as starting point to aid our understanding of the motivations behind their actions and their modus operandi, and therefore facilitate the development of prevention and intervention strategies.

Literature review

Definitional ambiguities and motivational variety: the need for a provider typology

Complementary and Alternative Medicine (CAM) (also known as 'integrative medicine') is an umbrella term encompassing a broad and heterogeneous range of healthcare approaches developed outside standard science-based medicine, some of which have a positive effect on patients' physical and physiological health (Ernst et al. 2006; EFCAM 2017). Besides benign types of CAMs, however, there are a number of pseudoscientific practices that can be extremely harmful. As summarised by Offit, a way to differentiate valuable complementary treatments from dangerous pseudomedicine is that the latter is recommended against helpful conventional therapies, promotes potentially harmful therapies without adequate warning, drains patients' bank accounts, and promotes magical thinking (Offit 2013:240ff).

Defining these dangerous practices, however, is not an easy task: the 'quacks' selling them often self-denominate their treatments as CAM, but many in the CAM community do not want to be associated with dangerous pseudomedicine (Lavorgna and Bishop 2017). To complicate matters even more, part of the scientific and medical community rejects all or most CAMs altogether as 'irrational approaches to medical practice' (Angell and Kassirer 1998:3) or as 'smokescreen[s] behind which enthusiasts of dubious practices try to incorporate their unproven therapies into routine health care' (Ernst 2011:21), which further hinders the possibility to isolate and investigate dangerous forms of non-science-based medicine. Furthermore, the same CAM remedy—for instance, the use of manipulative therapies—could be used, to continue with our example, as an effective way to improve general wellness and reduce stress in patients with migraines (Wells et al. 2011; Zhang et al. 2017), but it might also be used in a very dangerous way. One example among many concerns the fake Australian chiropractor George Zaphir, who was successfully prosecuted by the Australian Health Practitioner Regulation Agency (AHPRA) in 2018 for his unlawful use of the protected title 'chiropractor' and holding out as a registered health practitioner, while stating that he had an 85% success rate in treating cancer (AHPRA 2018).

In line with other studies (Lavorgna and Di Ronco 2018; Lavorgna and Bishop in chapter N in this book), we recognise that the categorisation CAMs as benign or as potentially dangerous quackeries depends on the contextual shifting balance between the benefits (health, quality of life, psychological, spiritual) and the harms (health, emotional and psychological, financial) they can bring to people. In our study, we will focus only on those 'alternative' health approaches that are, or are likely to be, seriously harmful for the patient, with a case-by-case approach to identify them. These types of CAMs have been previously described in the literature, among other things, as '(CAM) quackeries' (Lerner, 1984; Lavorgna and Di Ronco 2018), 'frauds' (Konnikova 2016; Lavorgna and Di Ronco 2017), and 'CAM-adjacent health scams' (see chapter N). These definitions, however, tend to suggest an element of *mens rea* (that is, the intention or knowledge of wrongdoing) that might not always be present in the provider, and hence these might not be the best terms to describe the complexity of offenders'

mindsets and motivations—this is why in this study we will more broadly refer to them as harmful non-science-based health practices.

Indeed, previous research suggests that individuals involved in harmful non-science-based health practices (herein referred to as 'providers') are not part of a homogeneous group, but rather they can be very diverse, moved by very different types of motivations: some seem to search profit, social prestige, or a combination of both; others seem to be under a self-delusion of having found the 'real' treatment and wisdom (Lavorgna and Di Ronco 2017, 2018). To the authors' knowledge, so far, no systematic analysis has been carried out to develop a criminological typology of providers. Nonetheless, other sources can give us an insight into the motivations of alternative medicine providers. For instance, in the fictional but semi-autobiographical book *Confessions of a Quack,* MD Bratman (2008) describes the adventures of Holistic Harry, an MD practicing alternative medicine 'on faith' who comes to realise the non-scientific value of his alternative medicine beliefs (because the treatments he proposes are based on tradition, anecdote, and authority, but they do not pass double-blind studies). This type of reading suggests that wishful thinking and idealism might be at the basis of honest mistakes done by some providers. This can be a valid explanation for the overselling of some CAMs (which would not meet any definition of fraud, as the *mens rea* requirement would be missing). However, it is self-evident that this explanation would be extremely simplistic to cover many, if not most, of the harmful alternative health practices praying on vulnerable or unwary individuals.

As anticipated above, others have attempted to frame some offenders as health fraudsters moved by profit. Konnikova (2016), for instance, in discussing the case of Belle Gibson (a former Australian wellness blogger who misled people from all over the world with her claims on how to treat cancer 'naturally', see also Lavorgna and Sugiura 2018) emphasises that she should be considered a con artist, motivated by personal gain. Konnikova reminds us that con-artists often have some or all of the so-called 'dark triad' of personality traits—psychopathy, Machiavellianism, and narcissism—, thus suggesting that we might better understand health fraudsters (and maybe classify them) by looking at their personality traits.

Existing literature (mostly grounded in criminal psychology) on offender typologies can provide a solid ground to further explore and problematise the complexity of behaviours, mindsets, and characteristics of providers. This literature will be briefly presented in the following section, with a specific focus on serial killer classifications. Indeed, whilst we do not want to suggest a resemblance between serial killers and providers, we think that we can learn from the literature on serial killers as it deals with similarly complex cases, where heterogeneous types of offenders are moved by many and various motivations.

Typologies of criminal behaviour: the case of serial killers

The development of offender typologies has a long history. Cesare Lombroso is credited with developing the first general typology of offending in 1876, where he identified six types of offenders. Whilst very primitive and the focus of intense criticism, Lombroso's typology of offenders set off a wave of academic focus on the development of offender typologies in order to understand, prevent, and treat offending behaviour (Wolfgang 2006; Byrne and Roberts 2007). Indeed, etiological and diagnostic typologies can be used to identify and rehabilitate offenders, whilst typologies developed from analysing patterns in offenders and crimes can aid criminal investigations (Gibbons 1975; Kapardis and Krambia-Kapardis 2004). Since the work of Lombroso, many typologies of offenders have been developed, ranging from sexual

offending (Fox and Farrington 2018) and arson (Kocsis at al. 1998; Santtila et al. 2003) to cybercrime (Warikoo 2014) and fraud (Kapardis and Krambia-Kapardis 2004; Chan et al. 2014).

Developing an offender typology of a serial killer is the most common application of typologies of criminal behaviour: there are a number of serial killer typologies that have been developed and many that attribute offending to a killer's pathology. Miller (2014) reviewed the assorted typologies of serial killers elaborated by other researchers, including those proposed by Deitz (1986, 1987), Holmes (Holmes and De Burger 1985,1988; Holmes and Holmes 1996), and Sewall and colleagues (2013). According to Miller, there are considerable commonalities across the different typologies which indicates a level of construct validity. From these commonalities, Miller proposed an integrative classification of common serial killer subtypes, which are: (1) sexual sadists; (2) delusional killers; (3) custodial killers, and (4) utilitarian killers.

Sexual sadists

Sexual sadists kill because they enjoy killing and get thrill and sexual gratification from torturing their victims in the process (Dietz 1986,1987; Rappaport 1988; Holmes and Holmes 1996; Myers at al. 2006; James and Proulx 2016). It has been argued that, among other things, serial sexual murderers are socially isolated, humiliated, rejected, have sexual fantasies that involve harming others or oneself, and lack healthy emotional and sexual relationships. Their modus operandi is well-planned as to ensure that the murder matches their fantasies: their crimes are sadistic and organised. There is evidence to suggest that paraphilias begin at a young age; a history of animal cruelty is a common characteristic of the sexually sadistic killer, which also often begins at a young age (Johnson and Becker 1997). According to Meloy (2000), the serial sexual killer is usually male, having killed his first victim before turning 30 years old, whilst victims are typically female, unknown to the killer, and are the same ethnicity as the killer. There are many documented examples of the serial sexual sadistic killer (Jack the Ripper being probably the most famous one).

Delusional killers

According to Miller (2014), delusional killers are killers who are on some sort of mission. This can either be because they are psychotic or because they are motivated by ideology, murdering people they see as undesirable or detrimental to the human race. Holmes and colleagues (Holmes and De Burger 1985,1988; Holmes and Holmes 1996) identified two categories that could fit into this classification of the delusional killer: the visionary serial killer, who is typically delusional and suffering from hallucinations (which are commanding him/her to kill); and the mission serial killer, who is driven by religious or political ideology and want to cleanse the world of a particular group of people. For Holmes, this type of killer might be diagnosed as delusional or they might not have any diagnosable mental disorder. The Anders Behring Breivik case is one example where the killer strenuously denied any mental illness, believing a diagnosis would delegitimise the political message he was trying to deliver (*The Telegraph* 2012).

Utilitarian killers

Utilitarian killers are centrally concerned with financial or material gain, but can additionally be driven by anger or revenge. In the Dietz typology (1986,1987), there are two categories which fit with the utilitarian classification: crime spree killers (for instance, Bonnie and Clyde), where robbery is often involved in the murders; and organised crime functionaries, which describes the typical hitman or political assassin, where the killers are being paid to murder a

specific person. In the Holmes' typology (Holmes and De Burger 1985,1988; Holmes and Holmes 1996) the utilitarian killer falls in the category of the comfort-oriented serial killer and includes hitmen and people who murder family members, for example, for financial gain. It is not unusual for feelings of hatred to also be fuelling the drive to murder family members. Miller (2014) discusses findings to suggest that, whilst men mostly commit serial homicides, 15% of serial murderers are female, with females being more likely to fit into this utilitarian typology, or the custodial killer typology discussed below. Of course, this does not mean that utilitarian killers are more likely to be female, only that on the rare occurrence of a female serial murderer, they will likely fall into one of these two typologies, rather than the sexually sadistic killer and the delusional killer.

Custodial killers

Custodial killers generally work in an healthcare, caretaker, or parental role; their motives might include ideology, revenge, 'twisted altruism' (where they believe they are helping their victim or wider society), financial gain, or power (where they enjoy having the power to choose whether someone lives or dies) (Miller 2014:6). Some put their victims' lives in danger so they can get credit from colleagues for going to great lengths to save the person, or the crisis situation is induced in order to attract medical attention—a version of Munchausen Syndrome by Proxy (MSBP) (Yorker et al. 2006). One particular subtype of custodial killers work in the healthcare sector; they are also referred to as 'angels of death' or 'healthcare serial killers' (HSKs) (Yardley and Wilson 2016). It has been reported that the incidence of healthcare workers murdering, or attempting to murder, their patients has increased since the 1970s (Field and Pearson 2010; Yardley and Wilson 2016), with notable examples from the United Kingdom including Harold Shipman and Beverley Allitt.

Lubaszka and colleagues (2014) identified patterns and activities that suggest HSKs engage in a similar type of confidence game as con artists: both HSKs and con artists target and groom their victims because of their vulnerabilities, and then take advantage of them; they use manipulation and self-presentation to gain trust and to appear helpful; whereas the con artist exchanges trust for money or other gain, HSKs exchange trust for hope; they both carefully plan their activities before, during, and after the event to avoid the likelihood of being detected (this can involve choosing methods that are less likely to draw attention). The effectiveness of the techniques adopted by HSK is evident in the number of examples where offenders were able to operate for many years before being caught and from the fact it was typically co-workers rather than the victim's families that raised concern: for instance, Beverly Allitt had tried to kill twins, but one lived and was left brain damaged. The parents of the children were so impressed with Allitt's efforts to save their daughter that they made Allitt godmother of their child (Lubaszka et al. 2014).

In terms of demographics, Miller argues that females are more likely to belong to the custodial or utilitarian types of killing, compared to any other category. There is also a tendency for HSKs to be portrayed as female in media representations. However, there are some relatively recent findings to challenge this gendered representation of 'angels of death'. For instance, Field and Pearson (2010) found that demographic characteristics such as gender and age revealed no typical offender. Instead, characteristics related to the killers' past experience, notably their experiences of emotional and physical abuse in childhood (which is also common in other types of serial killers) were better predictors (Field and Pearson 2010). Lubaszka et al. (2014) further report that in their analysis of cases, males were able to continue offending over longer periods of time, amassing more victims. Yorker et al. (2006) also report that males and females each made up half of the offending sample in their analysis. Further, they demonstrate

that most HSKs are Caucasian and from the US, Germany, and England and Wales, and most are nurses rather than doctors.

These offender subtypes demonstrate the heterogeneous nature of offending. The next section of the chapter outlines the methodology used to develop our own typology of harmful non-science-based health providers. This typology—and how it relates to the offender subtypes described above—will be outlined in the Discussion section.

Methodology

In order to access extensive information on a broad number of providers of harmful alternative health practices, we gathered data in and on the United Kingdom from a number of publicly available sources, namely newspapers articles, grey literature, and judicial material. The documents were coded manually, with relevant passages in the text categorised according to codes and sub-codes as summarised in Table 1. The use of documentary sources is consistent with other studies on offender typologies (Yorker et al. 2006; Field and Pearson 2010; Grugan 2018).

Newspaper articles

This study focuses on newspaper articles published in the United Kingdom over 10 years (1 January 2008- 31 December 2017). Articles were extracted from *Google News*. Trying to keep the search as comprehensive as possible, the following syntaxes were chosen for the keyword searches: '* [(quack*) OR scam OR fraud] AND alternative'; '* [(quack*) OR scam OR fraud] AND medicine'; '* [(quack*) OR scam OR fraud] AND health'; '* [(quack*) OR scam OR fraud] AND natural'. The search was entered based on the following criteria: timeframe (01/01/2008-31/12/2017); country (UK); type (all news); sort by relevance. After these preliminary keyword searches, articles were manually sorted to exclude those non-relevant for the scope of this study (e.g., articles focusing on counterfeited pharmaceuticals; articles on generic 'slimming pills' without any reference to potentially harmful alternative health practices; articles dismissive of CAMs in general, or without reference to a specific case/provider) and to eliminate duplicates. A total of 57 press items were identified as relevant for the analysis.

Grey literature

We searched for additional case studies in websites and, when available, in reports published by a variety of potentially relevant institutions, and specifically: the Medicines and Healthcare products Regulatory Agency; Citizens Advice; the Scams Team at the National Trading Standards; Action Fraud; the Royal Pharmaceutical Society; the Information Commissioner's Office (no relevant results were found in any of these); the Adverting Standard Authority (where we found 18 relevant cases within its rulings 01/01/2008-31/12/2017); relevant charities and debunking websites, namely Think Jessica, DC's Improbable Science, The Nightingale Collaboration, The Quackometer, and SenseAboutScience (where we found a total of 33 relevant cases). We also checked the websites of legit CAMs associations[2] and of the Complementary and Natural Healthcare Council[3] but we could not find anything relevant, with

[2] As listed in: https://www.citizensadvice.org.uk/health/private-healthcare/private-healthcare1/alternative-medicine-organisations/.

[3] That is, the British register for complementary healthcare practitioners who have met certain standards, which was set up in 2008 with government funding and support to protect the public.

the exception of 2 cases respectively in the websites of the General Chiropractic Council and the General Osteopathic Council.

Judicial material

Judicial material (mostly judgements, full transcripts whenever possible) was obtained after preliminary searches on three major databases (*The Law Pages*, *Westlaw*, and *Lexix Nexis*) and requests to the relevant Courts. We maintained the same timeframe (01/01/2008-31/12/2017), but the keyword searches were slightly different to adapt them to the different characteristics of the databases. In total, we collected judicial material for 4 relevant cases. Initial searches by legal categories on *The Law Pages* (fraud/attempted fraud; trade and licensing offence; misleading advertising/marketing; offences relating to fake goods; medicine/fraud; health, scam; fraudulent, health) did not lead to relevant results. Therefore, we carried out searches based on the names of key actors we identified via the media sources, which led us to the identification of one of the sampled cases. On *Westlaw*, we used the following keyword searches ('quack', 200 results; 'fraud AND health AND alternative AND medicine', 875 results; 'integrative AND medicine', 5 results; 'complementary AND medicine', 77 results) and searches by themes ('complementary and alternative medicine', 52 results; 'consent to treatment', 281 results). We manually scrutinised the results and identified a total of 4 relevant cases within our timeframe. Finally, we carried out keyword searches on *Lexis Nexis* ('(quack OR fraud OR scam) AND health', 993 results; 'alternative medicine', 44 results), which lead us to identify one new case and to collect additional material for one case identified before. We contacted the Courts involved to gain access to further transcripts, and were successful for one of our selected cases.

Table 1: Coding framework

Codes	Sub-codes (number of references identified after eliminating duplicates)
Provider	Named person (52)
	Named company (25)
	Named association/network of therapists/clinic/charity/homeopathic pharmacy/educational institutions (15)
	Non-identified (but reference to a specific individual, e.g. 'a therapist', 'a healer', 'an osteomyologist', etc. (11))
Demographic characteristics	Age (specified only in 11 cases, in years: 35; 39; 39; 45; 52; 53; 54; 56; 60; 62; 77)
	Gender (M=34; F=20)
	Occupation/qualification (yoga teacher:1; pharmacist: 1; qualified nurse: 1; discredited former doctors: 2; scientific graduates: 3; 'healers': 4; GP: 4; fake doctors: 5; nutritionists: 7; doctors running a private practice: 8; CAM practitioners, or presenting themselves as such: 20)
	Nationality (specified only in 6 cases: British; Irish; Slovakian; Mexican; Australian; German-American). From the context it can be supposed that the overwhelming majority of the other providers are British national and/or resident)
Organisation	Alone (43)
	Couple (3)
	Group (if 3 or more) (n/a)
Motivation	Financial profit (48)
	Desire to be credited (17)
	Genuine belief that they were helping (10)
	Holistic belief (5)
	Sexual motivation (3)
	Conspiratorial belief (2)

	Negligence/recklessness (1)
	Possible mental disorder after a trauma (1)
Antagonistic against science-based medicine (6)	

Results

Providers, their demographic characteristics, and their organisation

Through our sources we identified 52 distinct named providers, plus smaller numbers of non-identifiable providers, named companies, associations, clinics, pharmacies, and other institutions directly selling or otherwise offering (potentially) harmful health practices—for a total of 103 relevant actors. It is important to underline that most of the information presented in the following analysis does not focus on the named companies, as from the sources it was not possible to have enough understanding of the characteristics and organisational features of those running the company (e.g., a company might be managed by a single individual).

As regards the demographic characteristics, the data (although very limited) suggest a prevalence of middle-aged adults, followed by young adults. As providers might be active for years, it is likely that deviant behavior starts in early adulthood. There is a prevalence of male offenders, who come from a wide range of professions from both the modern scientific and CAM-related health sectors; we identified as male all the 'healers' and the fake and discredited doctors encountered in the analysis, which suggests a prevalence of men in the more 'extreme' cases. With a single exception (the wife in a criminal couple, who according to judicial data acted under the 'malevolent influence' of her husband), all the women identified were GPs, nurses, or CAM practitioners practicing traditional/recognised forms of alternative treatments (e.g., acupuncturist, herbalist, naturopath) or other health-related practices (e.g., nutritionist). However, they were bringing it too far, for instance by advocating a specific diet to treat diseases or conditions such as autism (often while questioning vaccine-safety). In two cases the female providers are described as mums of autistic children, and in one case a male provider is described as the dad of one of his patients. Most providers come from/are based in the local communities in which they operate, and seem to be well-integrated in those communities.

It is interesting to note that a majority of providers are CAM practitioners, followed by doctors (most of them running a private practice, but some operating in the National Health Service). The category 'CAM practitioners', however, covers also those self-presenting themselves as such, but who might be considered outliers by their colleagues—something to keep in mind when debating the necessity to regulate CAMs and the professionalization of CAM practitioners (Clarke et al. 2004; Kelner et al. 2004; Ijaz and Boon 2018). Nutritionists (a title that in many countries, including the United Kingdom, is not subject to professional regulation) follows. There are then cases of fake doctors, 'healers' (sometimes self-named 'bishops' or other labels evoking a religious/spiritual element), graduates in scientific disciplines, discredited former doctors (who continue to operate as providers of harmful alternative health practices despite being struck off the British medical register), a qualified nurse, a pharmacist, and a yoga teacher.

The majority of providers seem to be operating alone (in a few cases the provider was presented as operating in a clinic or pharmacy, but this does not prove the presence of a structured organisational form as he/she might be the only provider in said clinic). When operating in a group, providers still seem to enjoy a certain autonomy: a few associations and networks of

therapists were reported in the news, but also in this case we cannot conclusively say that a structured organisation is in place, as these networks and associations might be used by one or two providers to give themselves an aura of legitimacy and sophistication. From the analysis emerges a certain amount of professionalism in the activities carried out: they often entail preparatory activities and are generally carried out over a prolonged period of time, often years or even decades. Among the preparatory activities we could distinguish different forms of advertisement, the set-up of clinics and companies, and the organisation of conferences where therapeutic approaches are promoted and self-published books are presented.

Interestingly, we found 20 additional references (in the analysis of newspaper articles) of media and sport celebrities, as well as politicians, praising potentially harmful alternative health practices. Not to exceed the scope of this chapter, we will not focus on the role of famous testimonials in promoting medical misinformation; nonetheless, it is worth noting that their media presence is in line with what was found in recent analyses of media representations of alternative medicine (Lavorgna and Di Ronco 2018; chapter N), and their responsibility in drawing vulnerable readers closer to harmful practices and practitioners certainly deserves further attention and research.

Motivations

Financial profit is explicitly reported as the main motivation for providers in an overwhelming majority of news (e.g., '[he] lives a life of luxury founded on a model of encouraging desperate families to raise hundreds of thousands of pounds […] and then gives them worthless treatments that often extend suffering'). This is in line with the prevalence of the economic frame in British media in reporting CAM-related health scams, where perpetrators are depicted as con artists cashing in on the desperation of vulnerable patients (see chapter N).

Another prevalent motivation is the desire to be credited—that is, to receive validation and legitimation not only for the work done, but also and foremost for the identity they have built. Thus, training centres in alternative medicine which do not confer any legal qualification are named 'faculties' and 'colleges' ('She claimed that her PhD came from the American College of Nutrition, but it turned out to come from a correspondence course from a non-accredited US "college"'); in providers' clinics and houses we find 'certificates boasting [their] many qualifications' (such as diplomas in disciplines such as 'holistic nutritional practice' or 'naturopathic iridology'). Some providers present themselves as doctors even when they are not ('With […] the title "Dr" you might be forgiven for thinking that [she] is a medically trained doctor. She is not. But she describes herself as a "practitioner of health in its broadest sense", although not so broad as to be an actual qualified medical doctor'). Some dress up for the role, in a way that is probably meant to reassure potential patients ('Dressed in his white medical smock, with half-rimmed glasses perched on the end of his nose, Dr […] appears the stereotypical wise and helpful practitioner').

Interestingly, the specificities of some cases suggest that some providers do genuinely believe that they are helping their patients, as in the case of a mother (and doctor) using the same contested health approach for her children (e.g., 'She's a parent of a child with autism, so it would be hard to believe her motivations are anything but genuine'). A homeopathic pharmacist was reportedly dispensing homeopathic whooping cough vaccines also to his own children. In another case for which we could access judicial material, a CAM practitioner offering treatments of Reiki, aromatherapy, and reflexology became the victim of his own

practice. After discovering he had diabetes and an infected wound led him to gangrene and septicaemia, he decided not to accept conventional medical help, which led to his death.

In a minority of cases we found the presence of a sexual motivation to the crime. For one of these cases we could access some of the judicial files and therefore had more in-depth information. The main offender was running an alternative therapy clinic at his home, with the help of his wife. He deliberately misdiagnosed the women approaching him for help with medical problems as suffering from cancer. Then, under the pretence of administering beneficial treatment, he subjected his victims to penetrative sexual assault.

Some providers are motivated by strong inner beliefs and opinions, and specifically by holistic beliefs (e.g., 'as a spiritual healer, I believe that cancer is connected to the soul and to the life content of a sufferer') or by conspiratorial beliefs, with the consequence that they end up not trusting and believing the 'official' healthcare system (e.g., '[he] also runs an organisation […] which predicts the destruction of the world in a Third World War and says that 9-11 was a US government plot'). Indeed, some providers display an antagonistic attitude against science-based medicine (e.g., 'Most doctors don't listen to patients and don't want to consider views that undermine their authority'; 'I have faced 11 years of GMC [General Medical Council] prosecution simply because my ideas on medicine lie outside conventional medical practice. At least I have to be thankful that I live in the 21st century—earlier heretics were burnt at the stake!'; 'Probably the worst person to ask about this is your oncologist').

Finally, we identified isolated cases where it is suggested that behind the actions of a provider there is a possible mental disorder after a traumatic event (e.g., 'he approaches the dead body, sees the dead soul and realises he has some magic powers of some sort'), or negligence/recklessness (e.g., 'I know it should not say anything that says we are treating cancer […] I don't know how [a video strap line that included the word "cured" for a tumour treatment] got there. […] I don't write on my website, I have other people update it for me. I was checking the website, but obviously not everything that went on there').

Discussion

From the results of our analysis, we could identify some parallelisms among the many and various motivations at the heart of the activities of providers, and Miller's classification. On this basis, we propose a provider typology based on the following four subtypes: (1) utilitarian providers; (2) custodial providers (with the sub-types 'good-faith' providers and 'the egotistical fake' providers); (3) sexual abusers; and (4) delusional providers.

Utilitarian providers are moved mainly by the desire to obtain financial profit, and they can amass significant material gain from fraudulent practices. An element of fraud, indeed, is generally present, as these providers are aware that the treatment they propose are worthless. Simply, they do not care about the consequences of their actions. There are clear parallels with the utilitarian killer who kills for material gain; of course, for utilitarian providers the material gain would not typically be achieved by a killing per se (the death of the patient might not even occur) but by the fraudulent methods employed that leads to the payment of disproportionate amount of money for useless or potentially dangerous treatments.

Custodial providers have a recognised authoritative role and are in a position of power in comparison to their patients—who trust them, literally, with their lives. Generally, custodial

providers do not want to cause harm, but harm is a by-product of their actions. Depending on their predominant motivation, we can distinguish two distinct sub-types within this group. First, '*good-faith' providers* are those who genuinely believe that they are helping the victim. They are generally health-practitioners, working in modern scientific or CAM-related health sectors. The element of 'good-faith', of course, does not mean that they do not bear responsibility for their acts (even in those cases where their responsibility 'only' lies in overselling the therapeutic value of an alternative treatment)—responsibility that could be addressed as negligence or abuse of trust (that bond of trust at the basis of their relationship with their patients) at the minimum. We can identify here a limited parallelism with custodial killers, and more precisely with those 'angels of death' moved by mercy, who might genuinely believe that they are helping the victim by ending their suffering (even if this belief may be delusional).

Second, *'the egotistical fake' providers* strive for receiving credit, validation, and legitimation: they have built/are building an identity around their work as providers, often peddling degrees and accreditations or presenting themselves as certified health-practitioners while they are not. Nonetheless, their position towards their victims remains one of power, as their victims trust them and recognise them as health authorities. Here, a limited parallelism can be drawn with those custodial killers motivated by power and a desire for their life-saving efforts to be praised as heroic by their colleagues and by the family of their victims.

Sexual abusers have a sexual motivation to the crime; a major reason for them to act as providers is to have access to vulnerable victims, the treatment offered being a means to the sexual assault. It is possible that providers will show similarities with the sadistic killer; for instance, if they take pleasure in conning and harming the people that turn to them for help.

Finally, *delusional providers* believe themselves to be on a mission to heal or to rid the world/their social circles of westernised, science-based medicine, and/or 'big-pharma' influences. As in the case of the delusional killer, they might be moved by an ideological desire to protect the world from undesirable people (e.g., providers holding conspiratorial beliefs), or they might be psychotic.

Concluding remarks

This chapter has developed a typology of providers of harmful non-science-based health practices. The typology presented here has four categories: utilitarian providers, custodial providers, sexual providers, and delusional providers. Each category of provider demonstrates different motivations for committing harmful non-science-based health practices; motivations that have been linked to the classification of common serial killer subtypes. In addition to these typologies, a tentative discussion of the demographics and organisation of providers has been presented. The analysis demonstrated that there is a prevalence of middle-aged, male providers, whilst many providers are CAM practitioners and doctors. The results also indicate that providers are well-organised, professional, and are integrated into their communities.

This chapter should be regarded as a starting point for the further development of a criminological typology of harmful non-science-based health providers, which we hope could serve as a framework to filter the different experiences of similar dangerous practices in other countries, thus facilitating comparative research. Additional research—more in-depth analyses based on different types of data, such as interviews with providers—is required in order to

better understand the motivations and aetiology of providers. Further, the issue of the relationship between providers and their communities could be a point of exploration for future research. For instance, if we continue to draw parallels to serial killer typologies, the FBI typology of organised versus disorganised offender typology suggests that organised offenders would usually offend further away from home to reduce their chances of being caught (Ressler et al. 1986, 1988). However, the providers in the current analysis were organised yet operating from their own communities. Thus, it would be useful for further research to explore the reasons for this; for instance, is it because they believe in what they are doing, because it helps them seem more trustworthy to their victims, or for purely logistic reasons? Also, are there particular types of communities or social organisation that are susceptible to the influence of harmful non-science-based health providers? Such questions are important if we are to develop a useful typology to aid our understanding of the harms caused by providers, the motivations behind their actions, and to develop prevention strategies to minimise harm.

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