

This is an Accepted Manuscript of an article published by Taylor & Francis in Policing and Society on 21/02/21, available online:
<https://www.tandfonline.com/doi/full/10.1080/10439463.2021.1883609>

“It’s tough shit, basically, that you’re all gonna get it”: Virus testing in the UK and police officer anxieties of contraction of COVID-19.

Abstract

Policing is a high-risk occupation that can cause a myriad of psychosocial problems to its workers. During the COVID-19 pandemic officers have experienced increased rates of anxiety around contracting the virus, and these fears have been mirrored by their families, due to the largely unknown nature of the virus and mounting reports of police deaths across the world. Using data from 18 police officer interviews from a range of roles and forces in early summer 2020, this paper explores officer experiences of policing the pandemic, the emotional labour involved, and the detachment and displacement of anxiety and fear of working a global pandemic with little support from management.

Key words: policing, COVID-10; Coronavirus; emotional labour; stress; anxiety; police

Introduction

The current COVID-19 pandemic has become an ever-present threat to psychological health and well-being, particularly for those working on the frontlines as key workers. Even in the absence of a worldwide pandemic, policing is regarded as one of the most stressful occupations and poses a serious challenge to the psychological well-being of its workers (Lieberman et al. 2002; Fielding et al. 2018). Previous research into past outbreaks of infectious diseases have revealed wide-reaching and overwhelming impacts on anxiety and stress levels of individuals (Xiang 2020). Studies into the psychological impact of the *non*-infected indicated increased prevalence of negative emotions, poor coping capabilities and constant anxiety around contracting the disease or virus in question (Van Bortel 2016). Unlike other viruses however, COVID-19 presents a very dangerous and unknown risk to emergency works due to up to 80% of carriers being asymptomatic (WHO 06/03/20). At the time of writing (early January 2021), there were nearly 3 million positive cases and almost 80,000 deaths just in the United Kingdom (87 million cases, and nearly 2 million deaths worldwide). This is a rapidly changing situation however, increasing by 7% daily (growth factor of 1.07); there are still many unknowns with the virus and there is ‘much more to learn about the transmissibility, severity, and other features associated with COVID-19 and investigations are ongoing’ (Centre for Disease Control and Prevention (CDC) 04/08/20). The UK, given its comparatively small size, has suffered from one of the worst COVID-19 positive cases and death rates, currently in fifth position behind Russia, Brazil, India and the United States, which will not ameliorate the stress and anxieties felt by UK officers at this time.

During the pandemic, various front-line occupations (namely, National Health Service workers) became the emblem of the 'heroic' worker and were (rightly) exalted (XXX 2020); yet, others – like the police, were vilified. The police have historically experienced several forms of discrimination: devaluation, rejection, and exclusion (Link and Phelan 2001) and allegations of severe police misconduct broadcast through the media has a significant and lasting impact on public opinion (Weitzer 2002). Indeed, the killing of George Floyd in May 2020, which triggered Black Lives Matter protests in America which subsequently spilled over to parts of the UK, further magnifying the anti-police sentiment bubbling under the surface. This chain of events, coupled with reports of officers abusing the new powers surrounding the first England lockdown in March 2020, did little to enhance positive media coverage of the police. In the early stages of the first wave lockdown¹, Grant Shapps, the Transport Secretary, reported the overzealous attitude of some police officers using drones to spy on people taking walks in the peaceful countryside of the Lake District, stopping dog-walkers driving their pets for a stroll in the woods, and some forces had publicly urged supermarkets not to sell non-essential items such as Easter eggs (Aljazeera 31/03/20). More recently, in early November, Humberside Police were condemned for arresting a retired nurse after she removed her 97-year-old mother from a care home before the second lockdown began due to a previous lack of contact during the pandemic (BBC 05/11/20). These, and other reported examples of police misuse of power, were grasped by civil liberties group Big Brother Watch, which compared the measures to living in a 'police state'; the hashtag of which began trending on Twitter. This public resistance was partly in response to police officers performing a particularly unpleasant function (i.e., restricting people, reprimanding them, issuing fines etc.) and performing ambiguous roles and following instructions lacking clarity; at times, police were in the awkward position of attempting to enforce the 'unenforceable', which made them appear heavy-handed and even more objectionable in the eyes of the public. This situation has arguably added to the stress and anxiety experienced by officers during this time. After all, the social support of the public is critical in order to mitigate stress (Cobb 1976), especially when used as a coping strategy to handle and recover from a disastrous event.

Police officers have been known to work in a 'culture of invincibility' (Turner and Jenkins 2018), which may go some way to mitigate anti-police sentiment, and perceived individual risks and harms. This 'warrior mindset' (McLean et al. 2019) can be problematic however, as it may cause

¹ The first lockdown in England started on the 23rd March 2020, with restrictions easing on Saturday 4th July. The second lockdown began on the 5th November 2020, with all areas in England entering 'tiered' restrictions. The tiered restrictions for each area were decided based on five factors: 'case detection rates in all age groups, case detection rates in the over 60s, the rate at which cases were rising or falling, the number of positive cases detected as a percentage of tests taken, and pressure on the NHS including current and projected occupancy' (O'Reilly, 26/11/20). The third lockdown started on the 4th January 2021 and was yet to end at the time of writing.

too lax attitudes towards the virus, even though hundreds of police deaths from COVID-19 worldwide (Police One 2020) has shattered misconceptions that officers are safe from harm. Although interestingly the Office for National Statistics does not include police officers as being in a 'higher exposure occupation' (ONS 2020). Previous studies show that the death of a colleague in the line of duty (and this is not limited to the same force or country), is cited as by far the most 'psychologically destabilising' experience for the police (Miller 2007, p. 14; see also Fielding et al. 2018). SARS and Ebola findings revealed the impact of Post-Traumatic Stress Disorder (PTSD), depression, and anxiety during and after the epidemics on the general population (Lee et al. 2008), never mind those working in the emergency services. Rooney and McNicholas (2020, p. 1) found that staff on the frontline are 'exposed to an insuperable amount of stress and experience increased psychological morbidities as a result'. Since heightened levels of psychosocial problems are deemed to be an accepted 'occupational hazard' for law enforcement generally, there is also the additional challenge that staff may not be adequately supported by management (Bullock and Garland 2020).

Absence through sickness via the potential or actual contraction of communicable diseases and viruses impacts through lost working hours and can have a monumental psychological impact on officers and their families, not to mention physical side effects (Metropolitan Police 2018; see also Geoghegan 2016). Even before the COVID-19 outbreak, it has been noted elsewhere that the uncertainty of infection has an unprecedented impact on officer mental well-being (XXX 2019; XXX 2021a (forthcoming)). These heightened levels of fear can compromise an officer's job and have been associated with emotional fatigue, stress, anxiety, depressive symptoms, frustration and sleep disturbances (Rana et al. 2020; Mukhtar 2020), and the psychosocial effects on police officers is thus far a neglected area of research during the pandemic. Most of the scholarship and news reports on this topic concentrate on the experiences of healthcare professionals and the perspective of the police and their families have been largely overlooked; it has been documented that the spouses of healthcare professionals 'live in a state of fear' during outbreaks (Souadka et al. 2020) and this undoubtedly applicable to the families of other frontline emergency workers as well. Using data collected from 18 semi-structured interviews, this paper documents the experiences of UK police officers during the early summer of 2020 to explore their anxieties and fears of contracting and spreading COVID-19, their family's apprehension about their work, and the desire to be tested.

Methodology

Officers were recruited via a 'call for participants' on Twitter asking for volunteers². Not all officers use social media although there has been a growing interest in Twitter since 2008 from UK police forces' wanting to engage with the public and it is used as a tool for knowledge sharing in an official capacity (Crump 2011). When officers are using social media for personal use on privately held accounts, they are still held accountable for any information placed in the public domain. Although I specifically wanted to interview front-line officers using a purposive sampling method, a type of digital snowballing took place (O'Connor et al. 2014) in which I achieved 131 retweets, 45,380 impressions, and 2768 total engagements. Although these retweets resulted in significant engagements, only 31 officers in total contacted by private message expressing interest, of which two were personally known to me. Four expressed interest, but upon receiving the participant information forms, did not contact or reply again. Around a third of these officers did not identify themselves as working for any police force in their biographies, although positive identities were established³ upon sending a participant information sheet, consent form, data management plan and project summary through to a requested official police email address before participation was officially agreed. Five officers withdrew and did not rearrange after setting up interviews because of the Black Lives Matter protests and they understandably had refocused priorities and shifts rearranged. Four other officers said that they would have to 'get the go-ahead' from their 'research centres' before agreeing and did not reply after that. The police are a difficult population to access, particularly without familiar prior connections, and Twitter was chosen due to its potential to access a diverse range of participants, network connections, and is generally used as a platform for 'widespread conversation and the sharing of ideas' (Forgie et al. 2013, p. 8).

As previously mentioned, it had been reported in the news that forces were enforcing restrictions and experiencing the pandemic differently (procurement of personal protective equipment/imposing regulations etc.), and therefore hoped to interview officers from a range of forces so force preference/location was unspecified. I wanted to access the 'behind-the-scenes reality', and not the potentially 'sanitised public version' of officer experiences (Rugg and Petre 2006, p. 111-2). As I did not know most of the participants personally, it is difficult to sift exaggerated 'story-telling' from candid accounts, but data cannot be omitted because of this as the motives for participation 'are likely to be both multiple and elusive' (Litoselliti 2003, p. 23).

² "Call for participants: I am looking to interview front-line police officers policing the pandemic (ethics approved). I am interested in the fears and anxieties of contracting COVID-19 during this time – Interviews will take place over Zoom and will last approximately 1 hour. Please DM [direct message] me if interested. I am looking for around 20 officers as it is an exploratory/pilot study. Please retweet to your policing networks."

³ Conversely several officers asked for reassurance that their interviews would be anonymous – interestingly these same officers also asked for the link to my university profile to 'check credentials' even though my job, university workplace and real photo is on my Twitter profile.

This study, with 18 participants, is exploratory in nature, and as officers were from 14 different constabularies across England, generalisability is unviable. However, this was not the intention of this qualitative project, and it was designed to access the experiences of the officers who participated. Similar to Bullock and Garland (2020), the officers who volunteered were self-selecting, and the resulting accounts proved to be quite negative, particularly regarding the attitudes and support from management. Officers may be 'more motivated to speak [to researchers]' (Bullock and Garland 2020, p. 823), to perhaps air grievances in their force's handling of the pandemic and these accounts are not intended to be representative of overall officer experience in that particular force, or of the police in general; after all, the value of the interviews lie in how officers personally make sense of events (Bullock and Garland 2020).

There was no planned recruitment window, but due to the time sensitivity of the ongoing problems with PPE and sharp increase of infection rates (and thus increased anxiety surrounding their job), I was keen to interview officers as soon as they contacted and consented to the research. Interest tailed off after two weeks and I was not contacted by any more officers, nor were any officers/role rejected for interview. Interviews took place over Zoom between May and June 2020, resulting in over 20 hours of semi-structured interview data recorded with the platform's recording function, and officers were informed verbally and in the emailed forms that all data would be anonymised and they were permitted to withdraw their participation at any time during the interview or post interview up to a specified date.

Although Zoom was launched in 2012, its popularity soared as a conference platform at the start of the COVID-19 pandemic, and although the academic literature predominantly refers to Skype when discussing digital interviewing, the advantages and disadvantages can be similarly applied to Zoom – participants did not have to have a Zoom account to take part (unlike Skype), and joined the meeting via an emailed link. Interviewing in this way encourages participants where there are time and place limitations (in this case, social distancing and lockdown restrictions), and as all of the interviews took place either in the participant's homes (14 out of 18), or in a work office (4 out of 18), this provided convenient conditions (Janghorban et al. 2014). However, despite the benefits of digital interviewing, necessity of access to a high-speed internet, familiarity with online communication, and having digital literacy can affect the nature of the interview (Deakin and Wakefield 2013). Fortunately, all interviews were conducted without problems, and interviewing participants in their homes (with views of kitchen, living rooms, personal belongings and the like) afforded an unusual level of intimacy and informality.

Of the 18 officers, 11 were male, 7 were female, and they ranged from 22-54 years of age (average 35 years). 16 officers were married or in a relationship and 15 lived with their partner (1 lived with parents, 2 were single and lived alone), and 11 officers lived with children/stepchildren. The officers' experience ranged between 2 and 25 years (average 10 years), and the following roles were identified: 15 police constables/response/special/authorised firearms officer, and 3 sergeants/custody sergeants. I conducted interviews with 18 participants from 12 different forces: Metropolitan Police (3Ps), Norfolk (1P), Lancashire (4Ps), Durham (2P), Thames Valley (2Ps), West Mercia (1P), Cumbria (1P), West Midlands (1P), Sussex (1P), Yorkshire (1P), and Suffolk (1P). Ideally these interviews would provide some insight into an ethnically diverse group of officers, but this was not possible as the respondents self-identified as white British (n = 16), white Irish (n = 1), and Latin American (n = 1). The lack of diversity limits this study and I would hope to explore issues of diversity and intersectionality in any future work on this topic. In the sections that follow, I explore the findings drawing from the officer's narratives of their working experiences of the COVID-19 pandemic and their fears and anxieties around the risk of contraction, particularly as the majority of officers were living with partners and children.

Interviews were professionally transcribed verbatim using only the audio recordings from Zoom. with interviewees anonymised and given pseudonyms. To make sense of the data extracts presented, participants (P) are identified numerically and by gender and force, although on occasion, officers were fully anonymised due to the identifying nature of events. They were analysed thematically via processes of data familiarisation, coding, and then formation of themes. Using nVivo software, various nodes were produced such as 'lack of personal protective equipment', 'personal anxiety of the virus', 'family anxiety of the virus', 'management support' etcetera. Clarke and Braun (2018) described thematic analysis as the process of identifying, analysing and reporting patterns within data, and within this process immersion with the data was conducted by reading and familiarising with the transcriptions and producing initial observations. Initial themes (codes) were generated pertinent to the research aims and applied systematically using nVivo across the whole data set. This was an ongoing process of refinement and review in which quotes were chosen to illustrate themes.

Managing Stress

There is a large body of literature discussing how policing is regarded as one of the most stressful occupations and poses a serious challenge the psychological well-being of its workers (Lieberman et al., 2002; Fielding et al. 2018). Although it is well established that organisational factors contribute to police stress (workload, inadequate supervisor support etcetera), effective and

supportive responses to officers have been the focus of more recent research (Fielding et al., 2018; Bullock and Garland 2018; Bullock and Garland 2020), and it is reported that the most dangerous part of the job may well be psychological and not physical (Fielding et al. 2018). Fearing contraction of an infectious disease can have overwhelming impacts on stress levels and anxiety (Van Bortel 2016; Xiang 2020), and studies on other outbreaks such as SARS and Ebola have revealed the impact of PTSD, depression and anxiety during and after the epidemics on the general population (Lee et al., 2008). Rooney and McNicholas (2020, p. 1) found that staff on the frontline are 'exposed to an insuperable amount of stress and experience increased psychological morbidities as a result'.

Understanding organisational responses and the well-being of officers has undoubtedly become a more central concern in recent years (Bullock and Garland 2018). Absence through sickness via the suspicion of, or actual contraction of, communicable diseases and viruses impacts through lost working hours and has a monumental impact on the officers and their families, not to mention the physical implications (Metropolitan Police, 2018; see also Geoghegan, 2016). Even before the COVID-19 outbreak PolFed (2019) argued that the uncertainty of infection has an unprecedented impact on officer mental well-being and this has been documented in other research (XXX 2019; XXX 2020). These health concerns can include stress, anxiety, depressive symptoms, frustration and sleep disturbances (Rana et al., 2020; Mukhtar, 2020). Risks to the psychological wellbeing of police officers is a neglected area of research during the pandemic, as most of the current scholarship in this area concentrates on the experiences of healthcare professionals. The perspective of the police have been largely overlooked but as it is documented that spouses of healthcare professionals 'live in a state of fear' (Souadka et al., 2020) it is important to also explore the experiences of the police during this time.

Perception of Risk

In theoretical understandings of the social construction of risk, it is claimed that workers must first feel personally vulnerable before they perceive a situation as risky (Rosenstock 1974), but this can naturally extend to the risk consequently posed to family members. Factors that may contribute to these vulnerabilities and perceptions of danger may be the lack of knowledge surrounding COVID-19, particularly at the beginning of the pandemic. The risk of communicable diseases has been discussed mainly in terms of well-known 'older' complaints such as HIV, Hepatitis B/C and tuberculosis for example, but these cases are thankfully, few and far between. The likelihood of contraction, and the rate of mortality and morbidity is usually so low, that the perception of risk is further decreased. However, the true long-term effects of COVID-19 (now

known as 'Long Covid' (Carfi et al. 2020), were still largely unknown at the time of fieldwork, and thus the acuity of risk becomes much more pronounced. The knowledge that an individual has, to make judgements about hazards that others are exposed to, is used as a reference point to assess personal risk (Ferguson 1997). Therefore, risk theory argues that individuals understand their own risk levels to be higher if they perceive others to be at increased risk, therefore mounting accounts of police deaths across the world can only serve to amplify this anxiety. There have been several hundred police deaths worldwide so far (Police One 2020), and it has been reported that the coronavirus pandemic has been responsible for more police officer deaths in the line of duty than any other cause combined in 2020 (Hider 03/09/20). An officer, who had quite a relaxed attitude toward the virus in the beginning, soon changed his mind;

Do you know what, when it first started, I was one of those that was probably a little bit too cavalier about it. It was 'it's just a bit of flu. I'll have the flu, I'll take a couple of weeks off you know, whatever'. And then people started dying and you're thinking, hang on, there's summat to this, and then thousands started dying and you're thinking, crikey, alright alright. (P5, male, Durham)

Although it has been widely documented that police officers have one of the most stressful occupations, which makes them particularly vulnerable to psychological complications, this is still an under-researched area (Deshe[^]nes et al. 2018). The experiences that officers face at operational and organisational levels is integral to determining psychological well-being (Deschamps et al. 2003). Workers in front-line roles, particularly during highly stressful events, such as war, or a global pandemic, can suffer from emotional job burnout and stress-related physical complaints (Waters and Ussery 2007; Randall and Buys 2013). During the pandemic, officers were reportedly in some cases, 'repeatedly exposed to trauma' as they were called to homes where people have died from COVID-19, with 'one officer responding to 15 deaths in 24 hours' (*The Independent* 11/04/20). Crawley (2004) described the blurred divide between home and work is blurred this is described as 'work spill-over'. Crawley (2004) interviewed the spouses of prison officers and found that all of the participants had concerns about the impact of prison work on their husbands' physical and emotional well-being.

Emotional Labour and Displacement

Although officers expressed unease working during the pandemic, it was accepted that there was always a level of danger and risk associated with policing, although they were adamant that this risk should remain personal. Anxiety is a commonly felt, ongoing emotion in policing (Edwards and Kotera 2020), in the sense that most police officers experience some degree of anxiety whenever they are at work. Anxiety often arises from the unpredictability of the day-to-day

working practices of being a police officer, and although most of the work is mundane and routine, there is always the *possibility* of danger, risk and threat. Policing is an occupation where the constraints on emotional expression are strong, and thus dealing with the fear of COVID-19 may be managed by *displacement*; admitting that their family worry about them (rather than admitting they are actually worrying about themselves) and revealing that their family did not want them to work during the pandemic (rather than admitting they personally did not want to). There may be a sense of obligation, as demonstrated by *P10 (male, Lancashire)* who recalled his wife asking him to ‘come out of work’, but he argued that ‘it’s not as easy as that and you’d be letting down your team – basically someone’s gotta do it’. Law enforcement often engage in a significant degree of impression management (Mawby 2014), and the need for detachment is formally impressed upon officers during basic training on the grounds that allowing emotional labour to surface is far from ideal, which is the subject of much scholarship. Emotional labour can be described as the management of feelings, in order to create an observable display in accordance with what is ‘acceptable’ to the organisation (Hochschild 1983). Maintaining the appropriate demeanour in line with police department expectations requires officers to suppress their emotions (Bakker and Heuven 2006), in this case, the fear and anxiety of contracting COVID-19. Indeed, a recent YouGov poll (June 2020) showed that ‘over 70% of key workers are worried for the health of those they live with during the coronavirus pandemic, with 23% very worried... with only 53% of workers concerned for themselves’. The research summarised that key workers are ‘less concerned for their own personal health than that of their families’ (YouGov, 2020); indeed *P8 (male, Cumbria)* conceded that he was doing ‘whatever I can to make sure I don’t bring anything back home because that’s more my concern – my family as opposed to myself’. Most emotional labour research shows that detachment from these feelings can lead to emotional exhaustion and heightened stress levels (Hochschild 1983; Butler et al. 2003). The downplaying of trauma (individually and for others) can have devastating effects on mental well-being (Mukhtar 2020), and although officers detailed their foremost anxieties were the risk to their families and children, a few admitted their own personal fears of contraction. They thought the likelihood of catching the virus was ‘very high’, and they therefore had to emotionally manage and ‘normalise’ the situation to avoid ‘going off sick’:

I got really bad anxiety coming back, really panicked, really worried about my children. Really worried about me catching it, giving it to them. I had to kind of get around that really, otherwise, you know, I would have gone off sick. (*P13, female, Lancashire*)

There has always been the expectation from my point of view that you’re gonna get it and, you know, you just hope that you’re not gonna be one of the unlucky ones that gets it to the degree that you’re hospitalised or whatever, so that’s how you manage that fear. (*P2, female, Norfolk*)

At the start, I was more worried about it. I've got asthma as well; I didn't really know how it would affect me. But as [time] has gone on, [the pandemic] has just become so normal, I feel like if I get it, I get it. (P1, male, Metropolitan)

We're all level-headed, we all know we're going to come into contact with it, we all know that there's a heightened chance that we are gonna become ill and that's the main thing, we sign up for that, but we don't sign our families up for that. (P5, male, Durham)

So, I had to just think, right, potentially we're gonna get it. Me and my husband discussed it and we were like, you know, we're probably gonna get it, we're gonna be exposed to it, we'll just have to manage it [...] we just made the decision that we would distance ourselves from people, because we were the risk to them [...] we just pulled back from everyone, which was very isolating actually. (P13, female, Lancashire)

Most fear seemed to be displaced and emotionally managed by considering the effects on other people rather than the officers themselves. This detachment strategy could be likened to Hochschild's (1983) discussion of 'surface acting', where officers display only the emotions required for the job; (in this case – acceptance of their 'fate' in the probability of contracting COVID-19). However, emotional labour studies have shown that surface acting is directly correlated with burnout (Brotheridge and Grandey 2002) and is the consequence of a regulation technique that establishes emotional self-control (Bell and Eski 2016). Subsequently, it is less about the individual and personal consequences of virus contraction, but the associated guilt of potential transmission:

The risk is that I pass something on to my grandparents. So that's when the anxiety kicks in because I think, well, you know, could I live with the fact that I might have been the one that brought it back and you know... finished them off. So, I think a lot of the anxiety comes from the fact that ultimately a lot of us are young, and we could pass it on to other people. (P15, male, Yorkshire)

It's not even about you, it's about what it would do to your family [...] At the start I felt rather guilty going to work, coming home, no incubation period, I wouldn't know whether I had it or not, and then you'd go home and thus potentially infect your loved ones and things like that [...] Every time I approached my front door, I [thought] you know, I could be bringing this home and that could be really bad for somebody. I live in a block of flat so it might not even necessarily be my wife. It could be. A neighbour, neighbour's children. I don't really know, but that [fear] was certainly there. (P17, male, Metropolitan)

With my baby being so young, her immune system hadn't matured, so yeah, I was worried about that. (P10, male, Lancashire)

I feel a level of guilt because my girlfriend's got asthma, so she's [at risk]. I'm coming in been in God knows where, doing God knows what [...] So, when I'm coming home thinking I shouldn't be putting her at risk; exposing myself to that and then one step later I'm exposing her. (P5, male, Durham)

I'm relatively healthy [...] so if I did get coronavirus you would suspect that I'd be perfectly fine. It's not me that will take the hit on this, it'll be my daughter potentially, or the likes

of [my wife's] parents, or grandparents, so it's not necessarily you who's gonna be taking the brunt. Obviously as a police officer, you put yourself in the line of danger but you're not doing that with this COVID, it's your family you're putting in danger every day. So, I sort of took a bit of umbrage towards that. (P10, male, Lancashire)

The results from the YouGov (2020) poll also revealed that most key workers (70%) were more concerned with their family's safety rather than their own (53%), and this is intensified by the nature of police work. The day-to-day working practices of a police officer make it impossible to maintain safe social distancing for example, and therefore relatives were expressing their understandable concerns:

My wife was very uneasy at the beginning with me going back [...] yeah, yeah she was very concerned. (P12, male, Sussex)

My brother is a radiographer for the NHS [...] and me working as a police officer, it was a double whammy for my parents, and we were both still expected to handle [the crisis] as best as possible while most of the country was in their own homes. I would say that it caused my parents some stress and probably still does. (P17, male, Metropolitan)

My husband's asthmatic so to begin with he'd say it as a joke, but I don't think it was. It was like 'Oh, you'll bring it home and kill me' [laughs]. (P2, female, Norfolk)

I think [my wife] was very apprehensive at the beginning about me going to work. I mean, I was sleeping in the spare room, and had like, no contact with them, so it definitely made them more anxious. (P4, male, Metropolitan)

I speak to [my mum] on a daily basis, she's always worried, I mean obviously due to the nature of the job it doesn't help, but I think the COVID issue has been a real [cause] of anxiety for the family. (P9, male, West Midlands)

Early on in the pandemic, methods to test for COVID-19 and its related antibodies sparked a race to provide a meaningful and useful system to test, trace and track those working on the frontlines. Testing, which was not widely available during interviews in May and June 2020, were viewed by officers as a means to combat some of the fear and anxiety generated from working with the virus in close quarters on a day to day basis, and this signified a way to allay fears to family members.

The Problems with Initial Testing

Shortly following the genetic sequencing of COVID-19, Chinese authorities shared the genomic structure for international development of diagnostic testing kits. The capacity for testing increased rapidly and by early January 2021 there were nearly half a million tests per day being carried out, totally almost 55 million since the onset of the pandemic in the UK (GOV, 05/11/21). COVID-19 testing kits were slowly rolled out to frontline staff in Spring 2020 (the NHS were understandably the first sector to receive testing), but in early-April 2020, senior officials told the

Home Affairs Committee that they had been given ‘no date’ for when testing would be available to police (*The Independent* 09/04/20), leaving officers wondering how many months they would be working with no way of testing their exposure. For undisclosed reasons, up to 20% of the police force in the UK were self-isolating at any one time during the pandemic (*The Telegraph* 30/03/20). By the 17th April 2020, the government announced they were extending testing to more frontline workers, but again, provided no definitive date. It was reported that polymerase chain reaction (PCR) swab tests could be used to identify if an individual currently had the virus; ‘and this means those who test negative for COVID-19 can return to work as soon as possible to support essential services’ (GOV 17/04/20). This claim was accused of ‘jumping the gun’; the incubation period means that individuals receiving a negative result can still develop the virus days later (ibid.).

The government, along with Public Health England (PHE), were criticised for a failure to organise mass testing, particularly for key workers, and although there was still hope surrounding antibody tests this regime was beset by significant problems. Implemented accurately, antibody tests are a helpful tool mainly in showing which areas have been hit hardest by the pandemic – by Mid-April around 17% of Londoners had been infected (BBC 21/05/20). The WHO (24/04/20), argued in April 2020 that there ‘wasn’t enough evidence about the effectiveness of antibody-mediated immunity’ to guarantee what Matt Hancock had promised would be an ‘immunity certificate’ in order to ‘get back as much as possible to normal life’. Professor Peter Openshaw of Imperial College London, a member of the UK’s *New and Emerging Respiratory Virus Threats Advisory Group* argued that the government has a tendency in these circumstances to ‘jump the gun’, because there is ‘a huge pressure on politicians to come out and say things that are positive’ (Kirkpatrick and Bradley 17/04/20). There were rumours that some of our European counterparts were considering an ‘immunity passport scheme’, and although tentatively agreeing that the science was ‘too early’, Matt Hancock raised the idea on national news in early April 2020 that ‘knowing your COVID-19 [immunity] status could one day be very important’ (Reynolds 07/07/20).

Being a ‘Super-Spreader’

In early Spring 2020 NHS England began offering widespread antibody testing although it transpired that the tests could not tell whether the virus was transmissible, where they have got it from, or if they have protective immunity, the latter of which was, of course, inadequate information to police officers. During fieldwork, officers were very eager to be tested ‘to put their minds at rest’. However, when reports surfaced in June 2020 that antibody testing demonstrated

'no benefit' (Mundasad 25/06/20), interviews had already been undertaken, and at the time, officers believed there was a sizeable chance that themselves and colleagues were carrying the virus asymptotically. At the time of interview, when testing was not widespread, there was a fear of passing it on to the vulnerable:

We could be super-spreaders, we could be spreading this everywhere across the county. It's not just dealing with burglars; we go and see a lot of elderly people where they've had a fall and stuff like that and then you end up kicking their doors in just because there's a concern for welfare or whatever. But they're the ones where I go 'right, we need to be doubling our gloves up' 'cos you know, they're the ones potentially you could put at real, real risk. Police should be high priority for getting [tested]. (P10, male, Lancashire)

Although the government put police in line for priority testing in May 2020, it seemed to still be at management discretion whether testing was permitted or actively encouraged when interviews were undertaken in May and June 2020. An officer disclosed;

Nothing's really changed. Erm, we got told in briefing 'You're all gonna get it. It's tough shit, basically, that you're going to get it. [Interviewer: 'They actually said that?'] Yeah, yeah, [they said], 'you're all reasonably fit, young and healthy, so you should be alright', [so there's no point getting tested]. (P3, female, Lancashire)

This attitude was surprising to the interviewees, even though regular testing could have potentially helped curb the risk of 'super-spreading'. In September 2020, the head of Test and Trace, Baroness Harding, said that staff and patients in the NHS and care homes were current priority, accounting for 50% of testing (BBC 17/09/20), and although the police are now also prioritised, officers were not actively encouraged to have tests initially:

I think one lad in my team has been tested 'cos he didn't feel very well – he came back negative. So that's one person tests, [but] if you had the whole team tested, I'm sure someone will come back with it [...] I imagine it's probably because they want to test people at different ages – it's a force decision – It's a shame because [...] I was ill in December [2019], with flu-like symptoms and you think to yourself, well was that [the coronavirus]?" (P10, male, Lancashire)

It's just been, you know, only if you feel ill, then let [management] know. (P1, male, Metropolitan)

The antibody test has recently been introduced – you put your name forward for it, but only certain people are selected to do the test. So we're, as a team, sorta hoping that if four people that have been for the test come back with it and say they've had it at some point, they have the antibodies, then we're hoping, if they've got it, we've had it. That we've got an immunity against it, but obviously that's not necessarily the case. Some people could have had it but might not have developed antibodies from it. (P10, male, Lancashire)

It would be good to know because I had a bit of a sore throat and felt really lethargic for a couple of days [...] if there was an antibody test [available to us] and you could say 'right,

I've had it, fine, I feel a bit better about dealing with this now'. I wouldn't be complacent, but it would be easier to sort of know that you'd contracted it; I know that's something I can't control but that would make me feel better. (P7, female, West Mercia)

Lack of Support

The 'viral load' peaks early in COVID-19 infections and then gradually declines, with small amounts of the virus staying in the respiratory system for weeks or possibly months, emerging evidence suggests that individuals stop being infectious between 8 to 10 days after showing symptoms (Sethuraman et al. 2020). According to the CDC (04/08/20), the incubation period is somewhere between 2 and 14 days after exposure, and Lauer et al. (2020) found that more than 97% of people show symptoms within 11.5 days. At the time of fieldwork, police officers were not getting tested until they showed symptoms, and therefore there was a significant exposure timeframe to colleagues, their families and members of the public within the 11-day period – and of course, 80% of carriers never showed symptoms at all. Relaxed attitudes regarding transmission and testing has caused some considerable upset; in July 2020, P* (anonymised for welfare) contacted me post-interview to express concern about wanting to be tested:

So today I've gone to work, I feel really hot – high temperature, my husband feels exactly the same. I go down to the nurse in custody and she does a check and my temperature is 37 which is [okay], but I just feel really hot and unwell. I told my sergeants and they said, 'well that's only one [of the COVID-19] symptoms, and it's not that high so just monitor it'. Told me not to [bother] getting tested. How bad is that? So, I might just get myself booked in off my own back and get tested [...] and [my supervisor] was taking the piss and making me feel bad if I was to take time off [...] Not like me to worry but I am. I just don't know what to do and don't feel supported.

The next day, the officer tells me she feels better, and did not go for the test, but the lack of care from management had lasting effects. Previously constabularies have been criticised for their 'individual responses to officer well-being which places the onus on officers to cope with any pressures of the role rather than on the organisation to alleviate the source of stress' (Bullock and Garland 2020; see also Randall and Buys 2013). A few weeks before, the officer became alarmed at how relaxed her sergeant and other colleagues seemed to be about coronavirus. Upon raising concerns, their response was;

'[...]Why you being like that? Are you alright [P*]? What's wrong with you today?'

This caused considerable frustration for the officer;

It was really annoying that they weren't taking it seriously and I was made to feel stupid for saying something about it [...] I think they [all] just accept that we're gonna get it so why kick off about it?

She admitted later she felt upset about the scarcity of support, which can lead to increased psychological morbidities. Indeed, Rooney and McNicholas (2020, p. 1) found that in law enforcement, often 'mental health needs [go] largely unmet by the organisation'. Being 'ridiculed' by co-workers and a lack of support from the 'inside' can be just as taxing as external social stressors (Adams and Buck 2010). This is particularly concerning as co-workers are important sources of emotional support for each other (Morash et al. 2006) and reliance on other officers is vital in the course of their work (Graf 1986). When police officers stigmatise each other, it plays a significant role in determining how they deal with stressful situations and has been reported as one of the main reasons why officers avoid speaking up and seeking help (Stuart 2017). Similarly, it has been reported that the culture and style of police leadership is the most influential factor in mental well-being, rather than the role itself (Deshe[^]nes et al. 2018). Another officer discussed similar experiences;

I think if [other forces have experienced] anything like what's happened in Lancashire, I think, yeah there will be people leaving. I think it's made people think about their options maybe, and you know, that policing isn't everything. (*P13, female, Lancashire*)

It also cannot be ignored that female officers, working in a 'cult of masculinity' (Silvestri 2007) may suffer from teasing more often, and more readily. Notably it may be found that the pandemic may disproportionately affect trauma levels of female police officers as there were significant gender differences in police stress following 9/11 (Bowler et al. 2010). These attitudes can have a significant role in affecting staff morale during a crisis and may determine career longevity. Like most organisations, the police station encourages emotional 'zones' – places that officers are permitted to express particular emotions that are acceptable within that space. As discussed elsewhere (XXX 2021c (forthcoming)), officers who disclosed feelings of discomfort at how senior management dealt with complaints about laidback attitudes, the briefing room (where other officers are in earshot) was not deemed a 'safe' zone for the expression of these feelings. In P*'s case, it wasn't just senior management who dismissed fears about COVID-19 contraction, but other colleagues who wanted to caustically know 'what was wrong with [P*] today' and queried why she was 'kicking off'. Bullock and Garland (2018, p. 185) found that officers may experience forms of discrimination such as 'more or less subtle bullying', which in this example, is demonstrative of colleagues examining P*'s 'character, reliability, commitment and integrity', by questioning the attitudes toward the virus. This particular type of emotional stifling can also be

argued to produce detachment feelings. Considering the ongoing risk of transmission to officers and a lack of appropriate PPE (XXX 2021c (forthcoming), the police station should be an authentic, tangible representation of the precautions that needed to be taken for the virus and yet it seemed in these spaces, even during a pandemic, the normal 'feeling rules' of the organisation remain.

The Roll-Out of Mass Testing

Having a 'warrior mindset' (McLean et al. 2019) can cause officers to withdraw and detach from feelings that go against the 'feeling rules'. This bravado can translate into blasé attitudes about 'skiving'; it becomes less about *fear of the virus*, and more *we are just getting tested to get time off work*. In September 2020, the BBC (09/09/20) reported 'inappropriate' use of testing in the general population, and 'misuse' of the system. Tiwari (2014) found that low morale (perhaps caused by a lack of managerial support) can lead to malingering and high resignation rates. Officers admitted the temptation to 'skive':

I know of a few officers that go for a test pretty much every fortnight – it's a skiver's charter at the minute [...] I mean, we've got one officer that's had the test twice because they've had a cough. Now, they could have had [COVID-19], but it's also a way to get a nice little weekend off innit? (P5, male, Durham)

With the police [...] you get six months on the sick full-pay, you could just turn around and say, 'I literally don't feel comfortable at work, I'm too stressed out about it', which wouldn't be a lie. It didn't get to that point, but there were times when I was like, is this worth it? (P10, male, Lancashire)

Regardless of the reasons for officers wanting to be tested, the Scottish Police Federation's (SPF) chairman David Hamilton argued that the police were 'super spreaders' if they were not regularly tested, and the SPF called for frequent asymptomatic testing (BBC 11/05/20). Although this is not common practice for officers in England and Wales, there are emergences of similar working practices from other industries, such as care homes in Northern Ireland. Since the beginning of August 2020, all asymptomatic care home staff are tested every 14 days (asymptomatic residents every 28 days) (Public Health Agency 2020). Also, in August, Avon and Somerset police organised an event (EventBrite, 2020), offering antibody testing for police officers and staff over a period of three weeks to anyone who wanted one. Even as new research emerged that discounted the reliability and viability of antibody testing for predictive knowledge about coronavirus, the fact that it was freely available and encouraged may have helped morale for the officers in Avon and Somerset unlike the lack of support that some officers experienced in this study. However, perhaps the lack of motivation for management to encourage staff to go for testing is down to the

legalities surrounding track and trace. It is a legal requirement to self-isolate if you test positive for COVID-19 or if you are told to self-isolate by Test and Trace. There were concerns that strict application of the law for police officers, 'could see entire stations having to shut down, and that contact tracing could compromise sensitive information' and the government admitted that Test and Trace for emergency workers is 'complex' (Manthorpe 05/06/20).

Conclusion

Policing is a source of chronic stress and arguably one of the most mentally taxing occupations, and officers suffer from numerous mental health problems at a much higher rate than the public (Hartley et al. 2011). They are more likely to be heavily impacted than the general population as a result of the pandemic because they are key workers (Stogner et al. 2020), and the psychological repercussions of potentially spreading the virus to family members can only serve to exacerbate these problems. The long-term effects of policing the pandemic are yet to be seen; previous outbreaks have been much shorter in duration and not as widespread. The sustained exposure over several months, and with emerging evidence of further lockdowns and second waves across the continent may limit police officer capacity to engage in positive coping strategies (Stoberg 2020). Even pre-pandemic, a Cambridge University Survey, '*Policing: The Job and The Life*' (2019) found that police officers and staff score significantly lower on the WHO well-being indices than other sectors with the average sickness absence at over 20 days per year, and more than 20% of police officers had PTSD. Sickness absence is a growing concern with reportedly half of officers taking leave for mental-health related illnesses in the last five years (Police Firearms Officer Association 2017), and a 2016 Police Federation Study found that 39% of officers needed help for mental ill health; significantly higher than the general population (Houdmont and Elliott-Davies 2016; see also Bullock and Garland 2018; Fielding et al. 2018; Bullock and Garland 2020). After all, following the terrorist attacks of 9/11, over 20% of New York emergency responders reported PTSD symptoms more than four years later (Pietrzak et al. 2012), so we are unlikely to grasp the full repercussions for several years to come. Indeed, Lee et al. (2020) have found that the prevalence of psychological problems in the general population ranges between 4-41% of PTSD symptoms and 7% of depressive symptoms; this indicates that those working on the front-line may see an even higher pervasiveness of psychosocial problems during and after the pandemic.

The charity 'Mind', which advocates for better mental health for everyone, created help pages for workers detailing four main emotions that may arise during the pandemic; stress, anxiety, guilt and anger. Firstly, mind notes that stress levels may increase if your occupation involves 'coming into contact with a lot of people'. Mind also explores that anxiety levels may increase if there is a

concern about accessing personal protective equipment (PPE), the lack of which have been detailed elsewhere (XXX 2021b, forthcoming). Feelings of guilt may occur at the risk of passing the virus onto other people, as described by the officers in this study; and fourthly, officers may experience anger at not having access to the right equipment (for example, PPE and tests) and a lack of management and collegial support.⁴

Research has shown that emotional exhaustion can have a significantly detrimental impact on police performance (Bakker and Heuven 2006), and whilst much has been reported on workplace stress, research on internal psychological distress remains a neglected area of research (Edwards and Kotera 2020). The repercussions of the COVID-19 pandemic may see significant rates of increased psychosocial problems for police officers for many years to come; there has never been an event quite like this one, and it is important that mechanisms are in place to support frontline emergency workers. Different to other occupations, any display of emotional response to work stressors can be considered as a sign of weakness in policing (Kurtz 2008) and the ability to undertake emotional labour, surface acting and impression management (Hochschild 1983) is seen as a key requirement of an officer's 'working personality' (Waddington 1999). Unsupportive line managers and colleagues demonstrated in this paper as examples of ridicule, and the downplaying of the virus's seriousness, can only serve to elevate officer stress and anxiety, warranted or not. After all, a lack of organisation support can cause more stress than the job itself (Adams and Buck 2010; Van Der Velden et al. 2013). Previous and continuing experiences of lack of support (from leaders and colleagues) may have caused what was seen in this study from various interviewees; the *detachment* of fear of potential contraction (specific examples shown in excerpts by P1, P5, P13), the *normalising* of their (increased) high-risk environment (P1, P2, P5, P13), and the *displacement* of anxiety (by declaring it was their *families* that were most fearful and not *them*) (P2, P4, P9, P12, P17). This analysis should be understood as representations of events which may have been understood differently by other officers. Similar to Bullock and Garland's (2020) interviewees, it is unlikely that the negativity portrayed with regards to the organisational response to the pandemic was universal; instead, officers, in being self-selecting, may have volunteered to be interviewed because they were particularly dissatisfied with the way that their force or management team were handling the situation.

⁴ Several blogs and dedicated resources for key workers have emerged, including those for police officers, to help support the mental health of workers during the pandemic. Dr Jess Miller, Police Care UK's Director of Research, advised on various techniques and practical advice for frontline officers. She noted the 'shared anxiety' about the safety of police spouses and family as 'they risk bringing home the virus after each shift' (PolFed 16/04/20). Gradually constabularies have made available well-being interventions aimed at improving officers' coping mechanisms (Bullock and Garland 2020).

On a positive note, on the 9th November 2020, the UK government announced the breakthrough of a COVID-19 'milestone' vaccine potentially offering 90% protection (BBC 09/11/20). The first vaccine, licenced by Pfizer, was given in early December and in early January 2021, another vaccine from Oxford-AstraZeneca was approved for use. Although there are still many questions regarding the effectiveness of the vaccines, and various manufacturing and logistical challenges ahead, it is a 'watershed' moment (ibid). However, promising scientific breakthroughs aside, hospital and care home workers, and those who are in high risk categories will be prioritised first for the vaccine, again leaving police officers wondering when they will eventually feel 'safe' from the virus. On the 4th January 2021, John Apter, the head of POLFED, urged the government to ensure the police received 'priority access' to the COVID vaccines, and advised that the situation is worse than ever, with one in six officers off with COVID-related absence (The Telegraph 04/01/21). The national (and worldwide) roll-out of the vaccine will hopefully be swift and effective, allowing the world to return to some 'normality' of living and working.

References

- Adams, G. A., and Buck, J. 2010. 'Social stressors and strain among police officers: It's not just the bad guys', *Criminal Justice and Behaviour*, 37 (9), 1030-1040.
- Aljazeera. 31/03/20. UK police accused of abusing power to enforce COVID-19 lockdown, available at: <https://www.aljazeera.com/news/2020/3/31/uk-police-accused-of-abusing-power-to-enforce-covid-19-lockdown> (accessed 30th October 2020).
- Bakker, A., and Heuven, E. 2006. 'Emotional dissonance, burnout, in-role performance among nurses and police officers', *International Journal of Stress Management*, 13, 423-440.
- BBC. 09/11/20. Covid vaccine: First 'milestone' vaccine offers 90% protection, BBC Online, available at: <https://www.bbc.co.uk/news/health-54873105> (accessed 10th November 2020).
- BBC. 21/05/20. 'As it happened: One in six Londoners 'has had Covid-19', *BBC Online*, available at: <https://www.bbc.co.uk/news/live/world-52749186> (accessed 7th November 2020).
- BBC. 11/05/20. 'Coronavirus: Call for tests for frontline police officers', BBC Online, Available at: <https://www.bbc.co.uk/news/uk-scotland-52605182> (accessed 30th October 2020).
- BBC. 05/11/20. 'Woman arrested for taking mum, 97, from care home', 5th November, available at: <https://www.bbc.co.uk/news/uk-england-humber-54801702> (accessed 10th December 2020).
- BBC. 09/09/20. Coronavirus: People without symptoms 'misusing testing', BBC Online, available at: <https://www.bbc.co.uk/news/health-54088206> (accessed 16/10/20).
- BBC. 17/09/20. 'Coronavirus: Test demand 'significantly outstripping' capacity', available at: <https://www.bbc.co.uk/news/uk-54194302> (accessed 16/10/20).
- Bell, S., and Eski, Y. 2016. 'Break a leg – it's all in the mind': police officers' attitudes towards colleagues with mental health issues', *Policing*, 10 (2), 95-101.
- Bowler, R. M., Han, H., Gocheva, V., Nakagawa, S., Alper, H., DiGrande, L., and Cone, J. E. 2010. 'Gender differences in probable posttraumatic stress disorder among police responders to the 2001 world trade center terrorist attack'. *American Journal of Industrial Medicine*, 53 (12), 1186-1196.
- Brotheridge, C. M., and Grandey, A. A. 2002. 'Emotional labour and burnout: comparing two perspectives of "people work"'. *Journal of Vocational Behaviour*, 60, 17-39.
- Bullock, K., and Garland, J. 2018. 'Police officers, mental (ill-)health and spoiled identity', *Criminology and Criminal Justice*, 18 (2), 173-189.
- Bullock, K., and Garland, J. 2020. 'The organisation doesn't particularly consider itself responsible for you': Organisational support for officers injured in the line of duty and organisation (in)justice', *Policing and Society*, 30 (7), 818-834.
- Butler, E. A., Egloff, B., Wilhelm, F. H., Smith, N. C., Erickson, E. A., and Gross, J. J. 2003. 'The social consequences of expressive suppression'. *Emotion*, 3, 48-67.

Cambridge University Survey 2018. 'Trauma Resilience in UK Policing = Establishing the Evidence Base: 'Policing: The Job & The Life' Survey', available at: <https://www.policingtrauma.sociology.cam.ac.uk/survey> (accessed 28th October 2020)

Carfi, A., Bernabei, R., Landi, F., 2020. 'For the Gemelli Against COVID-19 Post-Acute Care Study Group. Persistent Symptoms in Patients After Acute COVID-19'. *JAMA*. 324 (6), 603–605. doi:10.1001/jama.2020.12603

CDC. 04/08/20. 'Coronavirus Disease 2019 (COVID-19) FAQs', available at: <https://www.cdc.gov/coronavirus/2019-ncov/faq.html> (accessed 14th August 2020).

Clarke, V., and Braun, V. 2018. 'Using thematic analysis in counselling and psychotherapy research: A critical reflection', *Counselling and Psychotherapy Research*, 18 (2), 107-110.

Crawley, E. 2004. *Doing Prison Work: The public and private lives of police officers*. London: Willan Publishing.

Crump, J. (2011). 'What are the police doing on Twitter? Social media, the police and the public', *Policy and Internet*, 3 (4), Article 7.

Deschamps, F., Paganon-Badinier, I., Marchand, A. C., and Merle, C. 2003. 'Sources and assessment of occupational stress in the police', *Journal of Occupational Health*, 45 (6), 358-364.

Desche^nes, A., Desjardins, C., and Dussault, M. 2018. 'Psychosocial factors linked to the occupational psychological health of police officers: preliminary study', *Cogent Psychology*, 5, 1–10.

Edwards, A-M., and Kotera, Y. 2020. 'Mental health in the UK police force: A qualitative investigation into the stigma with mental illness', *International Journal of Mental Health and Addiction*, <https://doi.org/10.1007/s11469-019-00214-x>

EventBrite. 2020. 'Coronavirus: Antibody testing available now – Avon and Somerset Police', 5th August 2020, available at: <https://www.eventbrite.co.uk/e/avon-somerset-police-antibody-testing-tickets-113632564058#> (accessed 30th October 2020).

Ferguson, E. 1997. 'HIV/AIDS knowledge and HIV/AIDS risk perception: An indirect relationship', *Work and Stress*, 11, 103-117.

Fielding, N. G., Bullock K., Fielding, J. L., and Heike, G. (2018). 'Patterns of injury on duty and perceptions of support amongst serving police personnel in England and Wales', *Policing and Society*, 28 (9), 1005-1024.

Forgie, S. E., Duff, J. P., Ross, S. (2013). 'Twelve tips for using Twitter as a learning tool in medical education', *Medical Teaching*, 35 (1): 8–14.

Geoghegan, R. 2016. *Spit Guards: The Case for Protecting Officers Against Infectious Diseases*. London: Centre for Public Safety, available at: <https://www.centreforpublicsafety.com/assets/pdf/spit-guards.pdf> (accessed 22nd February 2019).

GOV. 17/04/20. 'Government to extend testing for coronavirus to more frontline workers', available at: <https://www.gov.uk/government/news/government-to-extend-testing-for-coronavirus-to-more-frontline-workers> (accessed 30th October 2020).

GOV. 05/01/21. 'Testing in United Kingdom', available at: <https://coronavirus.data.gov.uk/details/testing> (accessed 06/01/21).

Graf, F. 1986. 'The relationship between social support and occupational stress among police officers', *Journal of Police Science and Administration*, 14, 178-186.

Hider, A. 03/09/20. 'Non-profit: Virus could be more deadly for cops than 9/11', available at: <https://www.wxyz.com/news/national/coronavirus/covid-19-has-killed-more-police-officers-in-the-line-of-duty-in-2020-than-all-other-causes-combined> (accessed 15/09/20).

Hochschild, A.R. 1983. *The managed heart*. Berkeley: University of California Press.

Houdmont, J., and Elliott-Davies, M. 2016. 'Police Federation of England and Wales 2016 Officer Demand, Capacity and Welfare Survey: Initial Report - Descriptive Results', available at: <https://www.polfed.org/media/14061/welfare-survey-2016-pfew-descriptive-results-report-v30.pdf> (accessed 5th November 2020).

Janghorban, R., Roudsari, R. L., and Taghipour, A. (2014). 'Skype interviewing: The new generation of online synchronous interview in qualitative research', *International Journal of Qualitative Studies on Health and Well-being*, 9:1, DOI: [10.3402/qhw.v9.24152](https://doi.org/10.3402/qhw.v9.24152)

Kirkpatrick, D. D., and Bradley, J. 17/04/20. 'UK pays £16 million for coronavirus tests that don't work', *The Independent Online*, available at: <https://www.independent.co.uk/news/uk/home-news/uk-coronavirus-tests-symptoms-covid-19-testing-kit-a9470071.html> (accessed 30th October 2020).

Kurtz, D. L. 2008. 'Controlled burn: The gendering of stress and burnout in modern policing', *Feminist Criminology*, 3 (3), 216-238.

Lauer, S. A., Grants, K. H., Qifang, b., Jones, F., Zheng, Q., Meredith, H., Azman, A., Reich, N., and Lessler J. 2020. 'The Incubation Period of Coronavirus Disease 2019 (COVID-19) From Publicly Reported Confirmed Cases: Estimation and Application', available at: <https://www.acpjournals.org/doi/10.7326/M20-0504> (accessed 30th October 2020).

Lee, S. M., Kang, W. S., Cho, A. R., Kim, T., and Park, J. K. 2018. 'Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients'. *Comprehensive Psychiatry*, 87, 123-127. <https://doi.org/10.1016/j.comppsy.2018.10.003>

Lieberman, A. M., Best, S. R., Metzler, T. J., Fagan, J. A., Weiss, D. S., and Marmar, C. R. 2002. 'Routine occupational stress and psychological distress in police'. *Policing: An International Journal of Police Strategies and Management*, 25, 421-441.

Litoselliti, L. (2003). *Using Focus Groups in Research*. London: Continuum.

Manthorpe, R. 05/06/20. 'Coronavirus: Police planning their own contact tracing system over concerns about government's version', *Sky News Online*, available at: <https://news.sky.com/story/coronavirus-police-fear-govts-contact-tracing-scheme-could-endanger-officers-12000761> (accessed 30th October 2020).

Mawby, R. 2014. 'The presentation of police in everyday life: Police–press relations, impression management and the Leveson Inquiry', *Crime, Media and Culture*, 10 (3), 239–257.

McLean, K., Wolfe, S. E., Rojek, J., Alpert, G. P., and Smith, M. R. 2019. 'Police Officers as Warriors or Guardians: Empirical Reality or Intriguing Rhetoric?', *Justice Quarterly*, doi: [10.1080/07418825.2018.1533031](https://doi.org/10.1080/07418825.2018.1533031)

Metropolitan Police. 2018. Operational use of spit and bite guard (SBG) in the MPS – EIA, available at: <https://www.met.police.uk/SysSiteAssets/foi-media/metropolitan-police/policies/strategy-governance—spit-and-bite-guardsbg-in-themps—equality-impact-assessment> (accessed 22nd February 2019).

Miller, L. 2007. 'Line-of-duty death: psychological treatment of traumatic bereavement in law enforcement', *International Journal of Emergency Mental Health*, 9, 11-23.

Mind. 2020. 'Coping with going into work during the coronavirus', available at: <https://www.mind.org.uk/information-support/coronavirus/coping-as-a-key-worker/#collapse315ea> (accessed on 28th October 2020).

Morash, M., Haarr, R., and Kwak, D. 2006. 'Multilevel influences on police stress', *Journal of Contemporary Criminal Justice*, 22, 26-43.

Mukhtar, S. 2020. 'Mental health and psychosocial aspects of coronavirus outbreak in Pakistan: Psychological intervention for public mental health crisis'. *Asian Journal of Psychiatry*, 51, 102069. <https://doi.org/10.1016/j.ajp.2020.102069>

Mundasad, S. 25/06/20. 'Coronavirus: Antibody test lacks 'proper assessment'', *BBC Online*, available at: <https://www.bbc.co.uk/news/health-53169618> (accessed 16/10/20).

O'Connor, A., Jackson, L., Goldsmith, L. 2014. 'Can I get a retweet please? Health research recruitment and the Twittersphere'. *Journal of Advanced Nursing*, 70 (3): 599–609.

O'Reilly, L. 26/11/20. 'What is the criteria for tiers? How the government decides which parts of England will be in tiers 1, 2 or 3' *The Evening Standard Online*, available at: <https://www.standard.co.uk/news/uk/how-are-tiers-decided-criteria-government-b79286.html> (accessed 22/01/21).

Office for National Statistics. 11/05/20. 'Which occupations have the highest potential exposure to the coronavirus (COVID-19)?', available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/whichoccupationshavethehighestpotentialexposuretothecoronaviruscovid19/2020-05-11> (accessed 06/01/21).

Pietrzak, R. H., Schechter, C. B., Bromet, E. J., Katz, C. L., Reissman, D. B., and Ozbay, F. 2012. 'The burden of full and subsyndromal posttraumatic stress disorder among police involved in the world trade center rescue and recovery effort'. *Journal of Psychiatric Research*, 46 (7), 835-842.

PolFed 16/04/20. 'Expert offers police officers tips on caring for mental health during coronavirus pandemic', available at: <https://www.polfed.org/gmp/news/2019/expert-offers-police-officers-tips-on-caring-for-mental-health-during-coronavirus-pandemic/> (accessed 7th November 2020).

Police Firearms Officer Association. 2017. 'Police Mental Health sickness up by 47% - The PFOA Newsfeed', available at: <https://www.pfoa.co.uk/blog/police-mental-health-sickness-up-by-47> (accessed 5th November 2020).

Police One. 2020. 'COVID-19: Law enforcement deaths: Tracking the coronavirus-related deaths of U.S. police officers and other LE personnel', Available at: <https://www.policeone.com/coronavirus-covid-19/articles/covid-19-law-enforcement-deaths-3ftkdPnVffq55iHU/> (accessed 28/07/20).

Public Health Agency 2020. 'COVID-19: Implementation of planned programme of COVID-19 testing in residential and nursing homes', available at: <https://www.publichealth.hscni.net/covid-19-coronavirus/testing-and-tracing-covid-19/testing-covid-19/covid-19-implementation-planned> (accessed 30th October 2020).

Rana, W., Mukhtar, S., and Mukhtar, S. 2020. 'Mental health and psychosocial aspects of coronavirus outbreak in Pakistan during the COVID-19 outbreak'. *Asian Journal of Psychiatry*, 51, 102080. <https://doi.org/10.1016/j.ajp.2020.102080>

Randall, C., and Buys, N. 2013. 'Managing occupational stress injury in police services: A literature review', *International Public Health Journal*, 5 (4), 413-425.

Reynolds, M. 07/07/20. 'Antibody tests were meant to be a game-changer. What went wrong?' Available at: <https://www.wired.co.uk/article/coronavirus-uk-antibody-tests> (accessed on 30th October 2020).

Rooney, L., and McNicholas, F. 2020. 'Policing' a pandemic: Garda wellbeing and COVID-19'. *International Journal of Psychological Medicine*, 1-6, <https://doi.org/10.1017/ipm.2020.70>

Rosenstock, I. M. 1974. 'The health belief model and preventative health behaviour', *Health Education Monographs*, 2, 354-385.

Rugg, G., and Petre, M. 2006. *A Gentle Guide to Research Methods*. Berkshire: Open University Press.

Sethuraman, N., Jeremiah, S. S., and Ryo, A. 2020. 'Interpreting Diagnostic Tests for SARS-CoV-2'. *JAMA*. 323 (22), 2249-2251. <https://doi.org/10.1001/jama.2020.8259>

Silvestri, M. 2007. 'Police culture and gender: Revisiting the 'cult' of masculinity'. *Policing*, 11 (3), 289-300.

Souadka, A., Essangri, H., Benkabbou, A., Amrani, L., and Majbar, M. A. 2020. 'COVID-19 and healthcare worker's families: Behind the scenes of frontline response'. *Eclinical Medicine*, 23, 100373, <https://doi.org/10.1016/j.eclinm.2020.100373>

Stuart, H. 2017. 'Mental illness stigma expressed by police to police', *Israel Journal of Psychiatry and Related Sciences*, 54 (1), 18-23.

The Independent. 11/04/20. 'Coronavirus: Police trauma warning after one officer called to 15 Covid-related deaths in 24 hours', *The Independent Online*, available at:

<https://www.independent.co.uk/news/uk/home-news/coronavirus-police-deaths-uk-lockdown-homes-mental-illness-a9459711.html> (Accessed on 30th April 2020).

The Independent. 09/04/20. 'Coronavirus: Police officers put at risk by PPE 'postcode lottery' amid clashing advice, association warns', *The Independent Online*, available at: <https://www.independent.co.uk/news/uk/home-news/coronavirus-police-ppe-postcode-lottery-lockdown-a9458401.html> (Accessed on 27th April 2020).

The Telegraph. 30/03/20. 'Police appeal for coronavirus tests for officers as disease absence rates rise', *The Telegraph Online*, available at: <https://www.telegraph.co.uk/politics/2020/03/30/police-appeal-coronavirus-tests-officers-disease-absence-rates/> (Accessed on 30th March 2020).

The Telegraph. 04/01/21. 'I urge the PM to protect police officers with a vaccine, so we can protect the public and the NHS', *The Telegraph Online*, available at <https://www.telegraph.co.uk/politics/2021/01/04/urge-pm-protect-police-officers-vaccine-can-protect-public-nhs/> (accessed 06/01/21).

Tiwari, U. 2014. 'A study on employee morale and its impact on employee efficiency at Jaypee Cement Plant Rewa (M.P.)', available at: <https://www.semanticscholar.org/paper/A-STUDY-ON-EMPLOYEE-MORALE-AND-ITS-IMPACT-ON-AT-Tiwari/5b216eac313fa74c406071af97599c4466df32c1?p2df> (accessed 16/10/20).

Turner, T., and Jenkins, M. 2018. 'Together in Work, but Alone at Heart': Insider Perspectives on the Mental Health of British Police Officers', *Policing: A Journal of Policy and Practice*, <https://dx.doi.org/10.1093/police/pay016>

Van Bortel, T. 2016. 'Psychosocial effects of an Ebola outbreak at individual, community and international levels', *World Health Organisation*, 94, 210-214.

Van Der Velden, P. G., Rademaker, A. R., Vermetten, E., Portengen, M. A., Yzerman, J. C., and Grievink, L. 2013. 'Police officers: A high-risk group for the development of mental health disturbances? A cohort study', *BMJ Open*, 3 (1).

Waddington, P. A. J. 1999. 'Police (canteen) sub-culture. An appreciation', *The British Journal of Criminology*, 39 (2), 287-309, <https://doi.org/10.1093/bjc/39.2.287>

Waters, J. A., and Ussery, W. 2007. 'Police stress: History, contributing factor, symptoms and interventions', *Policing: An International Journal of Police Strategies and Management*, 30 (2), 169-188.

Weitzer, R. 2002. Incidents of Police Misconduct and Public Opinion, *Journal of Criminal Justice*, 30 (5), 397-408.

WHO. 24/04/20. "'Immunity passports" in the context of COVID-19', available at: <https://www.who.int/news-room/commentaries/detail/immunity-passports-in-the-context-of-Covid-19> (accessed 30th October 2020).

WHO. 06/03/20. 'Coronavirus disease 2019 (COVID-19) Situation Report – 46', available at: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200306-sitrep-46-covid-19.pdf?sfvrsn=96b04adf_4 (accessed 10th November 2020).

Xiang, Y. T. 2020. 'Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed'. *The Lancet Psychiatry*, 7, 228-229.

YouGov. 2020. 'COVID-19: 70% of key workers are worried for family's health', available at: <https://yougov.co.uk/topics/politics/articles-reports/2020/06/20/covid-19-key-workers-health-social-distance> (accessed 28th October 2020).