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Police practitioner views on the challenges of analysing and responding to knife crime

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Abstract

Knife crime remains a major concern in England and Wales. Problem-oriented and public health approaches to tackling knife crime have been widely advocated, but little is known about how these approaches are understood and implemented by police practitioners. To address this knowledge gap, this article draws on semi-structured interviews and focus groups with 44 police personnel to consider the processes and challenges of applying problem-oriented and public health approaches to knife crime. Findings show that knife crime was seen as a complex social problem which would not be solved by 'silver bullets'; prevention was prioritised and the limitations of enforcement were widely acknowledged; there was an emphasis on understanding and responding to vulnerability and risk; discussion of 'holistic' and 'whole systems' approaches was evident (but these concepts were rarely defined); and the problem of serious violence was viewed as a shared, multi-agency issue that the police could not tackle alone. Various challenges were also evident, most notably around analysis of the drivers and patterns of knife crime and the evaluation of knife crime interventions. The article concludes by discussing the implications of the findings for knife crime prevention and the implementation and advancement of problem-oriented and public health approaches to policing.

Keywords Knife crime, Policing, Problem-oriented policing, Public health

Introduction

Knife crime—the illegal carrying of a sharp or bladed object or the use of one in violence—has received much political and public attention in England and Wales since the mid-2000s, when preventing knife crime became a major crime and public health priority. As supplements to law enforcement and deterrence, problem-oriented and public health approaches to policing have been advocated as 'upstream' and 'evidence-based' methods to prevent knife crime (Eades et al, 2007; Silvestri et al, 2009; Foster, 2013; Grimshaw & Ford, 2018; MacNeil and Wheeler, 2019). Considerable investment has gone into developing these preventive approaches, notably through the creation of Violence Reduction Units (VRU) (see Home Office, 2022) but also through more disparate early intervention activities.

Despite the importance attached to knife crime and the significant investments in its prevention, to date there has been little research into how the police and VRUs have approached knife crime prevention, and the challenges involved in implementing a problem-oriented and public health approach. To address this gap, this article draws on semi-structured interviews incorporating 30 informed stakeholders from police forces and VRUs and two focus groups with a total of 14 crime analysts. Our analysis considers how the police and VRUs analyse knife crime, develop responses and evaluate their impact. In so doing, this article contributes to the limited literature on the development and implementation of responses to serious violence in England and Wales. It also contributes to the literature on the delivery of problem-oriented and

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public health approaches to violence reduction. More broadly, this study sheds light on the processes through which evidence-based and data-driven ideas are (or are not) integrated into policing. It is our hope that by synthesising the experiences and insights of those involved in preventing knife crime, our findings can inform future efforts to facilitate, spread and advance the use of problem-oriented and public health approaches to policing.

The remainder of the article is organised as follows. The next section charts the recent history of knife crime prevention in England and Wales. We then focus on problem-oriented and public health approaches to policing, illustrating the similarities and differences between them. We then describe the data and methods used in this study. The results then follow, organised into three themes: practitioner views and experiences of analysing knife crime, responding to knife crime, and the evidence base around knife crime prevention. The article concludes by discussing the implications of our findings.

Preventing knife crime in England and Wales: a short history

Knife crime and the associated physical and psychological costs to individuals, families, and communities became a major focus of government crime prevention strategy in the early twenty-first century. Government responses to knife crime tended towards traditional law enforcement and criminal justice measures (HM Government, 2008; HM Government, 2011), including legislation to better regulate the carrying of knives in public places and the sale and possession of knives. For example, the 2019 Offensive Weapons Act made it illegal to possess dangerous weapons in private (previously it was an offence only to carry them in public) and introduced extra powers allowing the police to seize dangerous weapons. The 2019 Offensive Weapons Act also enabled courts to issue Knife Crime Prevention Orders[1] that could compel an individual to engage with services and desist from activities and peers thought to place them at risk of being involved in violence. The Criminal Justice and Courts Act 2015 similarly introduced mandatory minimum sentences for a second offence of possession of an offensive weapon.

In addition to legislative changes, the police implemented several programmes of enforcement and deterrence targeted at knife crime. Operation Blunt 1 (2004) and Operation Blunt 2 (2008–2009) provided police services with additional funding to conduct enforcement activity in targeted violence hotspots (McCandless et al, 2016). Operation Sceptre, introduced in 2020 and still coordinated nationally on a biannual basis, comprises a programme of knife crime-focused activities periodically undertaken in many police forces, ranging from knife crime awareness talks to 'weapon sweeps' in public and communal spaces. Between 2018 and 2020, the Home Office-funded 'Surge' programme provided funding to eighteen police forces in England and Wales to support enforcement activities and to provide additional staffing to respond to serious violence in general and knife crime in particular. In 2021, this programme was replaced by the 'Grip' fund. The name change was accompanied by an emphasis on hot spot policing, focussed deterrence and problem-solving in tandem with continued enforcement efforts.

Enforcement to tackle knife crime has increasingly been complemented by early intervention and prevention activities. For example, in 2008 the 'Tackling Knives Action Programme', which followed Operation Blunt 2, combined police enforcement with education and prevention interventions aiming to reduce the carrying of knives and serious stabbings among teenagers (Ward & Diamond, 2009). In 2009, the 'Knife Crime Prevention Programme' was developed comprising an education programme which aimed to reduce the prevalence of knife carrying and use by young people (YJB, 2013). In 2011, the 'Communities against Gangs, Guns and Knives' initiative funded local voluntary organisations across England and Wales to work with young people to curb their involvement in knife and gang-related violence.[2] Between 2018 and 2020, the Early Intervention Youth Fund[3] distributed £11 million to support efforts to prevent young people from engaging in serious violence and the Youth Endowment Fund was established with a £200 m 10 year budget with a remit to stop young people becoming involved in violence. And in 2019, the Government allocated £35 m[4] to establish VRUs in the eighteen police forces with the highest number of knife-related hospital admissions and allocated similar funding each subsequent year. Despite the significant investments made to reduce knife crime, robust evaluations of the impact of knife crime interventions remain sparse (McNeill & Wheller, 2019; Sidebottom et al., 2021).

Problem-oriented and public health approaches to policing

Amidst the wide range of programmes and practices put in place to reduce knife crime, two broad approaches have grown in popularity: problem-oriented policing

[1] See https://www.gov.uk/government/publications/knife-crime-prevention-orders-kcpos (19/06/2022).

[2] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/143757/caggkf-faq.pdf (19/04/2021).

[3] https://www.gov.uk/government/publications/early-intervention-youth-fund (19/04/2021).

[4] https://www.gov.uk/government/news/100-million-funding-for-police-to-tackle-violent-crime (19/04/2021).

(POP or problem solving) and public health approaches to policing. Problem-oriented policing was developed by Herman Goldstein as a framework for improving police fairness and effectiveness (Goldstein, 1979, 1990, 2018). It involves a systematic process of analysis to identify tractable causes of recurrent problems; the implementation of tailored responses based on that analysis; and an assessment of whether the identified problem (and associated harms) has declined as a result of the implemented responses (Eck & Spelman, 1987). Over the last forty years, a strong body of evidence has emerged which shows POP to be highly effective at reducing a wide range of crime and public safety issues, including serious violence (see Scott, 2000; Scott & Clarke, 2020). In a recent meta-analysis, Hinkle et al., (2020) concluded that although POP was not successful on every occasion, overall, it had tended to produce significant reductions in crime and disorder. Since its inception, most police forces in England and Wales have at some point experimented with POP, to varying degrees of commitment and success (Bullock et al., 2021a). Although widely endorsed, serial challenges have been identified in implementing and mainstreaming POP (Bullock et al., 2021b; Scott, 2000).

Studies have also stressed the importance of public health approaches in tackling knife crime (Eades et al, 2007; Silvestri et al, 2009; Foster, 2013; Grimshaw & Ford, 2018; MacNeil and Wheeler, 2019). Emerging from the United States in the 1980s, the public health approach to violence prevention emphasises the underlying factors that increase the likelihood that an individual will become a victim or a perpetrator of violence. It typically embodies several characteristics. First, it involves a process of defining and measuring a problem; determining its causes or relevant risk factors; working collaboratively with relevant partners to develop and implement strategies to tackle that problem; and evaluating the impact of selected interventions on the problem of interest (Chacko & Chacko, 2010; Rosenburg & Mercy, 1991). Second, a public health approach focuses on populations—defined as a group of people who share characteristics such as age, ethnicity, gender, geography, income level or country of origin, and who are commonly affected by a public health issue (Chacko & Chacko, 2010). Third, a public health approach takes a social-ecological perspective (Bronfenbrenner, 1979). This stresses that health is not the outcome of individual factors alone but a combination of individual, personal, community and societal factors (Rosenberg and Mercy, 1991; Chacko & Chacko, 2010). In relation to violence, interventions can thus take many forms, occur at different points across the life course, and involve making changes to the social, structural and situational forces thought to be contributing to violent behaviour (e.g. reducing the consumption of alcohol and other drugs, decreasing the cultural acceptance of violence, developing educational programs and making changes to the local environment, see Rosenburg and Mercy, 1991b). In practice, in the UK at least, current discourse around public health approaches to policing have tended to focus on distal causes of violence—the so-called 'causes of the causes'—most notably childhood experiences of trauma and neglect (Christmas & Srivastava, 2019).

In recent years, a language consistent with both problem-oriented and public health approaches have begun to feature in the UK government's approach to knife crime and in the police service's approach to crime prevention more generally. Neither approach featured in the 2018 Violent Crime Strategy. However, the strategy did call for 'a new balance between prevention and effective law enforcement'. It stressed that 'we want to make clear that our approach is not solely focused on law enforcement, very important as that is, but depends on partnerships across several sectors such as education, health, social services, housing, youth services, and victim services'. Likewise, the 'Policing Vision 2025' stressed the importance of proactive prevention and developing multiagency interventions to solve problems. Arguably the clearest signs of commitment to a public health approach was the establishment of 18 VRUs in 2019 (Home Office, 2020a, 2020b; Craston et al., 2020). They aimed to build capacity in local areas to reduce serious violence, bring together diverse partners to ensure a multi-agency response and to incorporate 'whole system' or 'public health' approaches to violence reduction (Home Office, 2020a, 2020b; Craston et al., 2020). Many VRUs in England and Wales mimic the Scottish VRU, introduced in 2005, which used a broad approach incorporating three strands: criminal justice enforcement measures, short and long-term preventative work, and efforts to change attitudes to violence.[5] Most VRUs also draw on the work of the Cardiff Violence Prevention Group, which reported significant reductions in violent injury through an approach comprising research, sharing data between the hospital and police, and collaborations between health services and criminal justice[6] (Florence et al., 2011).

[5] See http://www.svru.co.uk/ (28/04/2021). The Scottish VRU is often associated with successfully reducing violence in Scotland. Whilst rates of violence did fall in Scotland following the establishment of the VRI, there is some evidence of a potential crime reduction effect for the Scottish programme of activity, this cannot automatically be taken as a sign of effectiveness for the programme (Home Office, 2020a, 2020b: 7–8).

[6] https://www.cardiff.ac.uk/violence-research-group/about-us/violence-prevention-group (28/04/2021).

There are many affinities between a problem-oriented and a public health approach to policing (see Christmas & Srivastava, 2019; Davey et al., 2021): both are dedicated to using data and information sources to identify and analyse persistent and preventable problems; both draw on similar problem-solving processes[7]; both emphasise prevention, eschewing over-reliance on enforcement and the criminal justice system, and both are committed to evaluating the impact of selected interventions on the problem of interest. The two approaches are not identical, however, having developed independently and with different emphases. Public health approaches are primarily concerned with analysing how crimes and associated harms spread through populations, identifying risk factors and tackling vulnerability and adverse childhood experiences (known as ACEs). Responses to violence thus tend to focus on addressing individual, personal, community and/or societal factors and tend to have mid- and long-term goals. Problem-oriented approaches would not necessarily preclude such matters, but in practice tend to focus on the specific and immediate conditions that give rise to problems and orienting responses around changing those conditions to reduce the opportunity for crimes to occur. Therefore, its targets and effects are often more immediate.[8]

Despite the importance attached to knife crime, significant investments in its prevention and much discussion of the merits of various approaches, to date there has been little research into how the police and VRUs have approached knife crime prevention. Research is also lacking on the challenges involved in implementing a problem-oriented and public health approach to knife crime. This study seeks to address these gaps, and contribute to the literature on knife crime prevention. Next, we describe the data and methods used in this study.

Data and method

This paper draws on two sources of data. The first consists of semi-structured interviews with police personnel who had knowledge and experience of knife crime prevention. An email invitation to participate in this study was circulated via the national policing knife crime network, which covers all police forces and VRUs in England and Wales and is headed by the National Police Chiefs' Council knife crime lead. Participants self-selected to take part in the study. In total we conducted 29 interviews with 30 participants covering 18 of the 43 geographical police services in England and Wales. Most interviewees were knife crime leads in their respective police force or based in a VRU. Interviews were conducted either by phone or on Microsoft Teams and lasted around 1 h on average. All were digitally recorded and transcribed verbatim. Interview participants were asked to describe their current role and responsibilities in respect of knife crime, the nature of knife crime in their area, the types of interventions currently in place to reduce knife crime, their experience and perceptions of those interventions, and general challenges associated with preventing knife crime. The approach to interviews taken here is akin to 'key informant interviewing' (USAID, 1996), a popular approach for generating in-depth information based on the experiences, attitudes, and perspectives of an informed group of stakeholders.

The second source of data comes from two online focus groups conducted with police analysts. The authors cast a wide net when recruiting focus group participants: sending invitation emails via the abovementioned national police knife crime network, through existing links with the authors, via the suggestions of interview participants, and by distributing calls for participants on the social media accounts of the authors. In total we recruited 14 participants, all of whom identified themselves as analysts working for police forces in England and Wales, assigned either to VRUs or otherwise having responsibility for analysing violent crime data. Participants each took part in one of two 90 min focus groups, run through Teams, with participation determined by their availability. Like the interviews, both focus groups were digitally recorded and transcribed verbatim. Participants were asked about their experience of analysing knife crime, including which sources of data they used, what questions they attempted to answer, what analytical techniques they used, what forms of analysis they were generally not able to do due to data, time and/or resource constraints, and what evaluations of knife crime responses they had been involved in.

The use of multiple data sources taken from different samples and different organisations was our attempt to derive a more complete and accurate picture of the contemporary police response to knife crime. However, we acknowledge that the participants in this study may not be representative of the police service of England and Wales, nor can they necessarily speak for those police forces and VRUs not represented in our sample. While issues of representativeness are clearly important in research whose principal aim is accurately to represent a wider population (such as the police service in England and Wales), most relevant for the purposes of this study was to garner the views of those with sufficient

[7] See Sidebottom and Tilley (2011) who discuss the similarities between SARA, the dominant model for doing problem-oriented policing, and PDSA which is widely used in public health work.

[8] It is of course true that public health interventions can also target situational causes and produce immediate effects, as with seatbelts to reduce traffic-related harms and bridge barriers to reduce deaths by jumping.

experience and expertise to describe and critically reflect on current approaches to tackling knife crime.

Qualitative thematic analysis was conducted on both interview and focus group data. Analysis progressed through a process of reading transcripts, generating codes within the data, identifying themes and reviewing themes (see Braun and Clarke, 2006). In what follows, the results of our analysis are organised into three themes: the analysis of knife crime, responses to knife crime, and the evidence base around knife crime prevention. Quotes are included throughout to provide nuance and illustrate key points. The current study was reviewed and approved by the University of Hull ethics committee. Both interview and focus group participants gave informed consent and were told that all information would be reported anonymously.

Results

Analysing knife crime

Problem analysis is a core feature of both problem-oriented and public health approaches to policing. Interview participants shared the view that high quality data analysis is important and provided examples of how analyses of local knife crime problems had informed operational activity. One participant described a process whereby they: 'do a good in-depth scan, gather as much information as we can and then analyse that and see what possible responses we could put in place' (INT-20). In particular, interview participants described using analysis to identify and direct resources at prolific offenders and high crime areas. As this extract illustrates:

> *"Our analysts will do the analytical work behind the scenes. So, every month our tasking process is identify our highest harm nominals in terms of victim and offender, because I'm a firm believer in being intelligence-led and targeting those individuals that are going to create the most harm." (INT-23)*

However, across study participants, there were notable differences with regards to the availability of analysts and the quality of analytical outputs. Whilst a minority of participants described having access to a dedicated analyst, most interviewees reported having to share analysts with other teams within their organisation. Making use of analysts was thus dependent on: "which department you're in and … the nature of the risk. You can get analytical work done but obviously it's competing demands." (INT-20).

Study participants also highlighted several challenges associated with analysing the problem of knife crime. First, participants described the difficulties in analysing police datasets to determine the presence of knives used in violence. This was mainly attributed to inconsistencies in whether knives were 'flagged' in violence offences. As one interview participant said:

> *"It's very difficult to filter just knife crime because of the way things are recorded. So, if I went on there [police data system] and say I just want to look at robbery, I would still be looking at robberies that involved a firearm or any other type of weapon … it's very difficult to filter […] because the qualifiers we have on our crime system are bladed article. Well, bladed article could be broken glass." (INT-01).*

Similar experiences were reported in the focus groups:

> *"We've got a bladed article tag that is used but it doesn't pick up all of our knife offences, which does mean we do a long list of key words and manual trawls and reading through stuff to try and get the data that we need. And I think a lot of it is also trying to educate people, because I've read through all the Home Office guidance and understanding of what is a knife crime, what isn't, what can be included, but I don't think everyone has that understanding so they just leave it out if they're not sure." (focus group 1)*

Participants drew attention to how in some cases it was not always clear whether an incident involved a knife at all. As one interview participant explained: "you really need to scrutinise each [crime] report and think, 'was it actually seen or is this perception.' And there'll be probably a 70/30 split towards 70% being 'yes there's a definitely a knife or weapon involved' and 30% being there's just an assumption." (INT-27).

In incidents which *are* flagged as knife crime, study participants described how information on the knife itself tended to be generic and lacking in detail. This was attributed to a lack of knowledge about the different kinds of knives available, but also to a perceived failure to recognise that knowledge about the types of knives used in crime can help better understand and respond to local knife crime problems. As one interview participant stated: "It's not in people's consciousness that it's really important to be super accurate around it" (INT-10). In response, several study participants talked of the need for a more consistent approach to recording information about the sorts of knives used in crime and seized through police activities, ideally driven and co-ordinated at the national level.[9] For one interview participant:

> *"When I look at [crime] reports there's not much of*

[9] To this end, the National Data Quality Improvement Service (NDQIS) have developed a natural language/text mining algorithm to try and improve the quality of knife data. It uses free text and detail of crimes reports. See: https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/methodologies/policerecordedoffencesinvolvingknivesorsharpinstrumentsmethodologychanges(19/0/2021).

a mechanism in there for recording more specifically what knives are actually used in these offences and I think we could probably do a bit more to gather the kind of data that would help make a case for getting the legislation review through and amended." (INT-22).

The second identified challenge in analysing knife crime concerned an excessive reliance on police data (incidents and calls for service), which, because of under reporting, may provide only a partial and potentially biased picture of knife crime. As one interviewee remarked: "a lot of it [knife crime] goes on that we [the police] have no idea about. So ultimately, you're only going to have a very, very small fraction of the picture." (INT-09).

According to participants, reliance on police data when analysing knife crime was partly due to difficulties in accessing alternative (non-police) data sources. As one focus group participant described: "We struggle to get partnership data… I think there's a will to share but the reality of actually getting that data has traditionally been quite difficult" (focus group 1). Another focus group participant said:

"I think there's really a disjoint between … what Chief Officers think that we get and what we actually get. I think everybody talks about data sharing and have done in the 20 years I've been working here... I've never met anybody who didn't want to share data. The reality of it is, you know, that 'dare-to-share' ethos. I think the police are probably, in my experience, a little bit more open to that than some of our partners." (focus group 1).

Of the partner agencies that might fruitfully share data in the interests of better analysing knife crime, the importance of (and challenges in) accessing data from hospitals and the ambulance service was regularly discussed. As this interview participant explained:

"If you're involved in criminality and that results in you being stabbed, potentially you're not going to go and report that to the police. Maybe because you fear for repercussions or reprisals or you don't want any contact with the police. But you're likely to go and seek medical attention for stab wounds. So we've been able to use that to hopefully inform us and get a richer and better picture of where we're seeing knife crime occurring." (INT-06)

Despite a shared aspiration to draw on ambulance and hospital data when analysing knife crime, this was evidently not routine practice among the police forces and VRUs included in our sample. Some participating analysts reported that privacy concerns prevented partners from sharing these data with the police. Indeed, participants discussed the need to better facilitate systematic access to healthcare data. As this interview participant explained: "I think that's a piece of work that potentially needs a bit of pushing forward from the centre in terms of government policy because there are ways of linking data and protecting people's privacy" (INT-01).

Among study participants who *had* made use of hospital and/or ambulance data when analysing knife crime, most found that the added value was modest. Participants described how records often lacked detail which would improve the quality of crime analysis. For example, the precise cause of an injury may not be clear or details about the location of an incident might be missing. As one analyst described:

"It's high-level stats. It's not anything that we can break down and link in with our policing data. It's just these are how many hospital admissions you've had for a stabbing in the last quarter or month or whatever it is. It's not really anything particularly detailed." (focus group 2)

Another analyst in the same focus group added:

"The A&E data is very hit and miss. I would say 60% of the data is not geocoded and cannot be geocoded. Unfortunately, the location is a free text field that the receptionist fills in. It could be as poor as 'outside a school' or it could say 'in the home'". (focus group 2)

In sum, there was consensus among study participants that shortages in analysts, and limitations in the availability and quality of data, stymie the depth and scope of knife crime analysis. Participants talked of analysis being descriptive rather than explanatory, with little insight into the underlying causes of knife crime patterns. As one analyst explained:

"A huge difficulty we have is the why…. Like everyone said, it's really difficult to go into those incident logs and try and understand how have these individuals got to where they are now and why has this incident happened. That's something that we're trying to focus on now. We're trying to set-up a data group to get more of that qualitative information, try and piece it together a bit better." (focus group 2).

Responding to knife crime

Among study participants, knife crime was generally understood to be a multi-faceted problem that manifested itself differently in different settings. Consequently, participants shared the view that knife crime required bespoke solutions tailored to local conditions—a key

theme of problem-oriented policing. As this interview participant stated: "You have got to remember the context, because what works in London won't work in Burnley, do you know what I mean? I think we get obsessed with upscaling … and finding that golden solution, but I don't think there is one [for knife crime]" (INT-24). Indeed, there was general agreement among study participants that effectively managing the problem of knife crime would require a suite of complementary and context-appropriate interventions.

Several participants talked of a need not just to address the symptoms of knife crime but also to address the underlying causes of offending—a core tenet of a public health approach. In this regard, one interview participant stated: "'Deal with the offender, not the offence.' So, look at the individual and wrap around that trauma-informed approach of why does he need to go out and rob? Or why does she need to go out and traffic drugs?" (INT-12). In turn, there was clear consensus among study participants that prevention played a fundamental role in tackling knife crime. As one interview participant stated: "I think I would split that in two ways. What interventions we do in relation to tackling knife crime offenders, and what interventions we do in terms of hopefully preventing people getting drawn into knife crime" (INT-14). In this vein, participants drew attention to how law enforcement alone was insufficient to reduce knife crime: "We know we can't arrest our way out of this, we can't enforce our way out of this" (INT-08). However, others suggested that an enforcement mindset still prevailed in policing, and that changing this mindset remains difficult: "There's still that perception I think from some people that we can arrest our way out of serious violence and knife crime. But we can't, and ultimately we need that different approach to it." (INT-06).

There was an emphasis on shared ownership of responses to serious violence. One interview participant stated: "The only way we could tackle knife crime and the majority of issues is by buy-in from the public and other services. They all need to be part of the solution. Because if we try to do it on our own then we won't get anywhere" (INT-20). For another interview participant: "It's about making sure that you've got connections in the right areas because this isn't a police-specific problem, it's not a clinician's problem, it's a societal problem, it's ingrained everywhere" (INT-19). However, getting partners and communities involved in knife crime prevention, whilst clearly seen as important, was not automatically or easily achieved. One interview participant remarked that, "Breaking down some of the silo working is a constant barrier for us" (INT-25). Similarly, whilst ensuring that communities were on board was seen as important—both in ensuring that violence is seen as a priority and in delivering interventions—achieving this was described as an enduring challenge. As one interview participant stated: "It's providing that blanket wrap [around] support to the communities to problem solve as well and to empower them to do so. That's the aspiration and that might take some work though." (INT-25).

Participants described using many different approaches to tackle knife crime, directed both at places and people. In terms of the former, hotspot policing was widely adopted. Such operations were, as one interview participant told us, "Targeted in the sense that we know all our key violence hotspots, we know what times, we know that the transport hubs are locations where we will see a lot of this type of criminality take place" (INT-21). Various situational measures were also discussed, aimed mainly at reducing the availability of knives. These included knife sweeps (targeted searches of public places to recover weapons), knife bins/amnesties (providing an opportunity for people to hand in weapons that might otherwise be at risk of use in crime) and knife arches (which scan people to identify the presence of metallic items).

In terms of people-based interventions, several participants described being 'intelligence-led' and focussing activities on prolific offenders known to carry knives. As one interview participant stated: "we are very much intelligence-led and we'll be looking at specific people and directly led by what the intelligence is saying at that particular time" (INT-13). In addition, many participants stressed the need to couple targeted enforcement with supportive activities. As one interview participant told us:

> *"We engage with the habitual knife carrier, we then try and engage with their support mechanisms, their family, who are their positive role models that we can work with. So, we try to get in that way to pull them away from the group or the issue that they're with. But then also you've got your legislation route with them. So, if they're not engaging and they don't want to participate and they're committing offences then we go down the, you know, can we use legislation and the criminal justice route." (INT-20).*

Participants also repeatedly discussed the many educational and diversionary programmes being delivered to prevent knife crime, particularly school-based anti-knife programmes. Likewise, providing youth diversion programmes as a preventative tactic was often discussed. This incorporated varied activities such as sport, music and youth clubs. As one participant noted: "There are obviously loads and loads more examples that are all designed to try and appeal to young people before they get involved in violence and to try and steer them off the beaten path" (INT-15). Across these

interventions, a major challenge was the cost of sustaining their delivery over time. As one participant stated: "Well, the first difficulty with all of this, with the intervention and education stuff, is money. None of these things come cheap" (INT-14) and, "So, when we fund a charity for argument's sake, what happens when that funding comes away?" (INT-19).

Monitoring, evaluation and sharing good practice

Participants were asked to comment on the extent to which knife crime interventions were monitored and their impact evaluated, a key element of both problem-oriented and public health approaches to policing. In response, participants described how certain trends and outputs were routinely monitored. As one interviewee stated: "I can tell you how many knives we've seized, how many stop and searches we've done and how many intelligence submissions we've made" (INT-15). However, most participants shared the view that robust evaluations of knife crime interventions are limited. They attributed this to a lack of perceived need for evaluation, a lack of experience in conducting evaluations and difficulties in conducting evaluations (especially with regard to preventative interventions). As one participant, ruing the failure to learn lessons, put it:

> *"I'm a performance analyst and it's a bugbear of mine, not just knife crime, but any kind of operation or anything we put in place, that there is very little evaluation done in [named place] of it. It's a real bugbear of mine and my team that stuff happens, and you never learn from what's gone right and what's gone wrong for future operations, that kind of stuff. It's something that we're trying to push the force to think about more. I'm not saying it's never done, but it's not as often as we would like." (focus group 2)*

In addition, the general sense among study participants was that there was not enough dissemination of good practice. As one interview participant stated: "So I don't know how well we do share all that data and all that practice" (INT-04). For another, and more generally: "I don't think we have enough knowledge about what is and isn't effective and what has and hasn't worked. I think we're trying to do that, we're trying to move in that direction." (INT-20).

Discussion

Knife crime remains a significant problem in England and Wales. Considerable investment has been made into efforts to reduce knife crime, with a growing trend towards using problem-oriented and public health approaches. Presently, however, there has been little research on how practitioners tasked with reducing knife crime view and use these approaches, and the challenges involved. The goal of this article was to capture and synthesise the experiences of a sample of informed stakeholders involved in knife crime prevention in England and Wales.

Our findings suggest general support among study participants for the use of problem-oriented and public health approaches to policing. Aspects of the implementation of these approaches were evident in descriptions of how police forces and VRUs conceived of and were trying to reduce knife crime. However, several barriers to the successful implementation of these approaches were evident in the accounts provided. A key theme related to data and data analysis. As indicated previously, both problem-oriented and public health approaches stress the importance of understanding and analysing preventable problems. And, although study participants described many instances where the analysis of knife crime was being undertaken, many participants also described serial challenges in working up detailed and sufficiently rich pictures of local knife crime problems. This was attributed to various factors including a lack of analysts, limited access to analysts and various data quality problems, particularly the lack of (consistently applied) 'flags' for knife crimes and accurate information on the types of knives used in knife crime (see also Bullock et al, 2021b; Sanders and Henderson, 2013; Burcher & Whelan, 2018; Cope, 2004).

A further problem was the reported reliance on police data. This is potentially problematic for several reasons. First, if police forces are both the generators and users of data, biases in data can be created: a vicious circle is thus produced whereby some individuals and places once initially identified as problems are increasingly targeted and intelligence is generated about them, which in turn increases their perceived suitability as targets for intervention and enforcement. In addition to legitimacy and civil liberty concerns if this process occurs, it will also result in biased administrative data that has limited potential for accurately understanding the causes of crime problems (Knox et al., 2020). Second, a more immediate implication of a heavy reliance on police data is that, because of under reporting, the precise populations and situations around which responses ought to be oriented may not be evident from the analysis of police recorded knife crime incidents.

Participants recognised the pitfalls in relying on police data alone. Many had sought alternative data sources to improve problem analyses and address potential biases. To this end, it is noteworthy that although there was general agreement among study participants about the

promise of hospital and ambulance data, there was also much disappointment expressed about difficulties in forming data sharing arrangements and, when such data were accessible, concerns about data quality. These sentiments speak to long-standing concerns about data quality (Department of Health, 2015), concerns that appear to have not been adequately addressed by the health or police service and which presently stand in the way of what could be more effective and efficient intelligence sharing (Brophy et al., 2022).

Both problem-oriented and public health approaches to policing call for the need to evaluate the implementation and impact of selected interventions. Doing so can help learn lessons about what worked, and what didn't, in the interests of driving police improvement. To this end, we found little evidence of commitment to evaluating the interventions being used to reduce knife crime. While represented police forces and VRUs were evidently collecting data on the *outputs* of selected interventions, such as knives retrieved, people stopped and searched or school children engaged, rarely was this information supplemented by evidence on the impact of interventions on *outcomes* (i.e. relative reductions in knife crime). This finding is consistent with the research literature on knife crime, in which there has been repeated calls for more and better evaluation research (see Eades et al., 2007; Silvestri et al., 2009; Foster, 2013; MacNeil and Wheeler, 2019; Sidebottom et al., 2021). Indeed, our findings highlight that even for common knife crime interventions, such as weapon sweeps or knife arches, important questions remain about how best to implement them, the contexts in which they are more or less effective, and whether positive outputs are reliably associated with positive outcomes (see Sidebottom et al., 2021).

What, then, are the implications of our findings both for knife crime prevention and the implementation of problem-oriented and public health approaches more generally? Four issues are highlighted here. The first concerns engagement with partners and the public. Whilst engaging partners and communities in tackling serious violence was viewed as important, achieving this was not without its challenges. The organisation of police work and local authorities was not always deemed conducive to effective partnership working because of organisational silos, complex local governance arrangements, and rigid financial rules (Bullock, 2019). Likewise, engaging communities—both in ensuring that violence is seen as a local priority and in delivering interventions—was seen to be challenging. A sustained emphasis on developing partnership working will be necessary if multi-faceted approaches to knife crime are to take hold and flourish in England and Wales. Second is data. Linked to the previous point regarding partnership working, our findings point towards the continued need to promote and facilitate data sharing between those organisations implicated in knife crime and its prevention. In addition, to understand more precisely the people and places around which responses should be developed and to facilitate the implementation of problem-oriented and public health approaches, there needs to be a greater emphasis on improving the quality of data collected on knife crime incidents, bringing together diverse datasets, and routinely providing analyses of these data that help identify the precise nature of knife crime problems as they affect particular places and populations. To this end, we are encouraged by the recent efforts of the National Data Quality Improvement Service to use natural language processing and text mining to try and improve data quality for knife involved offences. An arguably more complex problem is the sharing of data between organisations. The responses elicited in this study suggest that little has improved since collaboration between services to prevent violence was made a statutory requirement in the Crime and Disorder Act (1998). Concerns over privacy and data governance remain major obstacles to inter-agency data-sharing (Brophy et al., 2022).

The third issue of note concerns organisation. Whilst the cohort of participants taking part in this research recognised the importance of going beyond law enforcement when tackling knife crime, such commitment has reportedly not permeated the police organisation as a whole. Persuading police personnel to prioritise prevention as much as enforcement and responding to incidents emerged as a significant challenge, one which has been noted in previous studies of problem-oriented policing (see Bullock et al., 2021b). Breaking those routines may be difficult and take time. Finally, both problem-oriented and public health approaches to policing stress the importance of evaluating the impact of selected responses so as to learn lessons, reduce unwanted harms and generate improvements. This is a central plank of being evidence-based. It is therefore noteworthy that despite the scale and harms of knife crime, and the significant government investment in its prevention, presently the evidence base for knife crime reduction is sparse, notably so when compared to other crime types such as burglary and car crime. Addressing this evidence gap is important. Robust evaluations of popular knife crime interventions are needed to determine if, how and for whom such measures are effective.

To conclude, whilst the language of problem-oriented and public health approaches was evident among study participants in the context of knife crime prevention, the evidence presented here suggests that such approaches are currently being applied unevenly and imperfectly. Our findings indicate widespread agreement amongst informed

police practitioners that knife crime is a complex social problem which would not be solved by a single agency, a single intervention or, arguably, a single approach. They suggest that there has been an emphasis on understanding patterns of knife crime and working in partnership to introduce responses that go beyond the enforcement of the criminal law. The need to better understand what is effective in preventing knife crime was also widely recognised by stakeholders working in this field. These points chime with the conditions needed to facilitate the introduction of problem-oriented and public health approaches to crime prevention. Nonetheless, police practitioners were also clear that there are challenges in introducing these approaches—availability of data and analysts; partnership working; and nature of the evidence-base about the outcomes of interventions designed to address knife crime. To further embed problem-oriented and public health approaches, sustained attention will need to be paid to developing analytical capacity, facilitating the processes and structures of partnership working, and facilitating evaluation of knife crime prevention interventions. Without this investment and multi-agency system-wide changes in mindset and cooperation, knife crime prevention activity may well continue the contradiction of supporting proactive prevention but relying on reactive enforcement.

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Karen Bullock coordinated and conducted interviews and led on data analysis. They also led on the writing of the paper. Iain Agar contributed to the conceptual framing and writing of the paper. Matthew Ashby conducted field work and contributed to the conceptual framing and writing of the paper. Iain Brennan led the project and contributed to the framing of the paper, literature review and writing of the paper. Gavin Hales contributed to the framing of the study, literature reviewing and writing. Aiden Sidebottom led on the project and contributed to the framing and writing of the paper. Nick Tilley contributed to the framing of the paper, literature review, and writing of the paper. All authors read and approved the final manuscript.

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None.

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