In brief

A simple definition of a ‘public health approach’ would usually imply preventing disease, prolonging life and promoting health through the efforts of society, rather than through clinical health interventions such as medicine and surgery. Public health is underpinned by a distinct set of principles. These include a focus on the whole population, not just on high risk individuals, and an emphasis on prevention and early intervention in ways to tackle the causes of the problem. A whole system-wide approach is needed to achieve this.

But there are challenges. There is no magic bullet. We are already doing much of what we need to do, but we are operating in very difficult and constrained funding circumstances. Public health is not the cheap option. Success also requires real commitment to changing the social determinants, which requires political will and a broad coalition of government departments, sectors and other stakeholders. Success will not be immediate.

Knife crime is not an issue that can be left to criminal justice interventions to solve alone. Investing in our whole population of young people is critical in order to reduce the numbers at highest risk.

Violent injuries in young people are generally rare, but there is a concern that they have been increasing recently in the UK. This is particularly the case in relation to concerns about knife crime, which have received considerable press attention. In the year to March 2018 (the most recent statistics available at the time of writing), 103 young people under 25 were killed with a sharp instrument in England and Wales, up from 67 the previous year (Office for National Statistics, 2019).

A major response has been a flurry of policies and investments in policing and security (e.g. HM Government, 2018). However, following the pioneering success of the Scottish Violence Reduction Unit set up in Glasgow in 2005, there has been a parallel increase in interest the benefits of taking a ‘public health approach’ alongside this. Indeed, serious youth violence is framed as a significant public health concern by the World Health Organisation (WHO, 2015).
What is a “public health approach”?  
The superficial appeal of a public health approach is that it does not sound unduly punitive; it sounds as if it reframes the issue as one where the focus is on promoting wellbeing and tackling underlying causes, rather than on legal and penal responses. This seems particularly appropriate when we are talking about children and young people.

However, there is more to it than this, and a truly public health approach can be rigorous and challenging, deriving as it does from a rather different world view from the individual responsibility model that tends to frame criminal justice interventions. A simple definition might be preventing disease, prolonging life and promoting health through the efforts of society, rather than through clinical health interventions such as medicine and surgery.

In order to properly take a public health approach, we need to understand the underlying principles as they subsequently direct the kinds of interventions that we employ. At its heart, public health is about populations. It is not about curing individuals, but it is about improving average population health. The emphasis in traditional public health is to get the maximum benefit for the largest number of people. As a result, individuals benefit, but the approach does not start with the individual. The classic way of demonstrating this is Rose’s “Bell-Curve Shift in Populations” model (Rose, 1985), which is shown in Figure 1.

This is sometimes illustrated by focusing on alcoholism and alcohol-related deaths. If we assume there is a normal distribution of alcohol consumption within the population, then the majority of people would be found in the ‘normal’ range, and equal proportions in the ‘low’ and ‘high’ categories. Those at the top end of the high-risk category are those who die of liver related damage or accidents as a result of drinking, etc. If we reduce the whole

population’s alcohol consumption, we move the whole distribution curve to the left, and the proportion in the really risky section on the right-hand side will reduce as a result.

The principles of a ‘public health approach’ that arise from this are these:

- There is a focus on whole population, not just on high-risk individuals
- The emphasis is on prevention, on ‘upstream’ interventions that are aimed at the causes of the problem, not at its treatment
- A whole system-wide approach is needed, including action by all parties and stakeholders (such as, in the case of alcohol, industry, primary care, education, and a wide range of government departments)
- There is an emphasis on collective responsibility for health and a major role for the state (not just individual responsibility)
- There is an emphasis on working in partnership with the population being served. Public health is undertaken with and for communities
- There is a focus on tackling underlying inequalities as a major cause of health inequalities
- Interventions are data driven. Understanding the characteristics and needs of the population are key, and actions should be evidence-based
- Brave decisions are taken, requiring long-term commitment. Shifting a population is like changing the direction of a large ocean bound tanker. It is not something done with a quick intervention in a nifty small sailing boat.

What is the problem that we want to solve?

Public health approaches are designed to tackle specific, clearly articulated problems. We cannot just say we want to improve the health of the population. We need to know whose health, what kind of health, over what time period. So we need to be quite clear about what we mean by “knife crime”.

It is not obvious that this has been clearly articulated in the current debates. The following are all issues that are being discussed in the current discourses about serious youth violence. Where do we want to start?

*By reducing the use of weapons in the first place?* Indices of ‘use’ might include:

- Reducing the number of reports of knife crime. Do we mean all knife crime, or specifically that among 10-24-year-olds? Or 10-19-year-olds? Or everyone under 25?
- Reducing availability of knives? Again, do we mean specifically availability to under 25s, or do we mean in general to everyone?
- Reducing the numbers of young people carrying knives? This is undoubtedly a good idea, but do we know how this relates to rates of homicide with sharp incidents?

*By reducing people injured or killed by weapons? (i.e., the result of use)*

- Reducing knife deaths – again, do we mean specifically among those aged 10-24?
• Reducing the number of young people (under 24? Under 18?) who receive hospital treatment for knife crime? But it is not clear whether this is driven by knife crime, or by use of hospitals, so how do we account for that?

**By improving outcomes for young people affected?**

• Improving the physical and mental health outcomes for everyone affected by knife crime – victims, perpetrators and witnesses? To include perhaps reducing fear of crime? This is a much broader target and goes beyond the issue of knife crime.

And as well as determining what the outcome is, how do we measure success? Different patterns are recorded in the British Crime Survey, statistics from the police, British Transport statistics, Hospital Episode Statistics and other sources. We need to decide which combinations of sources should be regarded as the best reflection of the outcome we are focusing on.

What is clear is that youth knife violence is strongly related to a wide range of underlying factors that themselves are not part of the definition of violence. The Greater London Authority’s Strategic Crime Analysis Team recently laid this out extremely clearly, demonstrating that the factors most strongly associated with serious youth violence were poverty/deprivation, education, and mental health and wellbeing (GLA, 2019). They provided a series of striking charts showing the relationships. Figure 2 below demonstrates the strong relationship between the proportion of the population who were victims of serious youth violence and the area score on the indices of multiple deprivation. The relationship – which is probably complex – between serious youth violence and deprivation needs to part of any solution. These kinds of findings suggest that a public health approach is probably the right one.

![Graph showing the relationship between proportion of population who were victims of serious youth violence and area deprivation score](image)

**How do you take a public health approach to knife crime?**

So, if we agree that youth knife crime is an appropriate topic for public health, and we agree to take on board the principles and approaches of public health, what should we be doing?

**Primary prevention:** Primary prevention is at the core of public health. This involves controlling the causes of a problem. If we are successful, the whole distribution of our primary outcome variable will shift to the left. Actions might include:

• Reduce the ubiquity of/access to weapons (through laws, policing, screening)
• Help more with alcohol and drug misuse (with resources such as ‘Talk About Alcohol’, a website designed to be used by young people in a classroom setting as part of PSHE lessons on alcohol)
• Raise awareness (in appropriate and sensitive ways) among young people and anyone else who matters to the issue (including projects such as, for example, No Knives Better Lives, which is a campaigning collaboration between the Scottish Government and YouthLink Scotland.; Policy Scotland Youth Volunteers; Medics against Violence)
• Reduce vulnerability to getting involved, offer purposeful alternatives (including, for example, sustainable training options; focused youth work)
• Control/shape (social) media reporting
• Tackle material deprivation/income inequality affecting youth in order to break the link with higher rates of serious youth violence
• Reduce trauma, victimisation, and humiliation among young people (drivers of youth crime).

Secondary prevention: Truncate the distribution. This means shortening the right end tail of the distribution by focusing more on groups falling into the top end of the normal section using targeted prevention strategies, to stop people drifting into the high-risk category. Actions might include:

• Intervening with those already involved in risky lifestyles (interventions such as Catch 22 gang exit programme; focused deterrence, work with gangs)
• Reducing school exclusions (for example, IPPR’s The Difference)
• Focusing child and adolescent mental health work on marginalised young men

Tertiary prevention: Strictly speaking this is where we start to drift out of the territory of traditional public health, but there is a place for this in the model. This is where we intervene after the problem has clearly manifested itself, and by this stage we are inevitably more focused on individuals than groups. Actions might include:

• Recovery, rehabilitation, exit strategies (including hospital-based violence reduction programmes, programmes to support young people leaving custody)

There are two provisos that must accompany this list. The first is that the evidence base for the effectiveness of many of the individual programmes mentioned is limited. There are all sorts of reasons for this, partly due to the challenges of conducting this kind of research, but overall it leaves us without a definitive set of best practice options. Several think tanks such as the Early Intervention Foundation have done much work on systematising what we know and giving ratings to programmes, but there is still a way to go. The second is that it may be as much an issue of having an array of the right interventions in the approach, rather than the power of any individual intervention. Again, we know little about the right approach to this and it will vary hugely by local context and the particular needs of the young people who live there.

Challenges of taking a public health approach to youth knife crime
Public health is not the easy option. Neither is it the cheap option. It should produce cost savings in the long run, but often these are (a) sometime in the future and (b) of benefit to another ‘department’ other than that that did the original funding. For example, if we improve the life chances of young people today, by investing in interventions paid for by the Department for Education, the benefits may in the long run be returns to the Treasury and reductions to unemployment, uptake of benefits, use of NHS services etc, none of which help the Department for Education. Given that public health budgets are now held locally this is also an issue at the local level; how will one cash strapped Local Authority focus its funding on this when the likelihood is they will not experience the benefits of the intervention as, for example, their young people may move away for jobs as they transition to adulthood?

So public health will not work unless it is funded. It is worth noting here the mismatch between, on one hand, what we know about the causes and correlates of serious youth violence, the correlation with deprivation and the importance of improving youth engagement in constructive activities and, on the other hand, what we know about increasing levels of child poverty, reductions to the per capital public health spend on young people, and the decimation of the youth services sector.

In addition, public health narratives can sometimes appear to give too much responsibility for the cure (and failure) to certain practitioner groups, without following this with funding. The classic example of this currently is education, where everyone is very keen for education to be reframed as an exemplar site for public health interventions, but individual school funding is generally agreed to be in crisis.

Additionally, if the narrative around the role of deprivation in public health outcomes is not carefully managed, it can turn out to seem deterministic and stigmatising – “it is not just this particular young person who is an issue or who needs help, but this whole area is to blame” – this can then seem very hard to tackle and potentially vilify particular communities in an unhelpful way.

Finally, stressing ‘public health’ as if it is a new and adventurous way of approaching an old issue can be misleading. Much of what is said above about interventions is not new, or rocket science. We do not need to call this ‘public health’ to know that much of it works. There is already a lot of understanding and good work underway in the communities that matter, and acknowledging, funding and supporting this is what is important, whatever we call it.

**Conclusions**

Public health provides a useful framework for helping us to think about how we should focus our efforts if we want to reduce youth knife crime. It helps us to articulate the right questions and provides a model for considering different levels of intervention. It moves us on from models that focus entirely on individuals, to those that stress the importance of communities and the intensely social (anti- or otherwise) context for youth violence.

But there is no magic bullet, and we are doing much of it already but just in very difficult and constrained funding circumstances. The classic public health intervention was that undertaken by John Snow in the 1850s, when he discovered the cause of a cholera outbreak in London was the water supply and managed to solve the problem by breaking
off the handle on the pump providing the main source. There is no single identifiable pump in the case of youth knife crime. The causes are multiple and complex, and are rooted in the social determinants of health and behaviour. The response will likely have to be multi-pronged as well.

While crime/criminal justice interventions need to be part of the response (these are crimes), if we want to turn off the pump(s) we know that the more fundamental answer is going to lie in investing in young people, not narrowing their options or marginalising them from the country’s economic and political life.

References


About Dr Ann Hagell

Dr Ann Hagell is a chartered psychologist with a specific interest in young people’s health. She is Research Lead at the Association for Young People’s Health. She has a Master’s in public health from the London School of Hygiene and Tropical Medicine and a PhD from the Institute of Psychiatry. She has published widely on adolescent wellbeing and has worked with a range of funders, think tanks and universities in the field of adolescent development. She is Consulting Editor for the Journal of Adolescence and an ad-hoc reviewer for various journals and funders in the field. Ann is also a member of the World Health Organisation GAMA (Global Action for Measurement of Adolescent health) Advisory Group.