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# MedEd Symposium 2024

**Imperial College**  
London

# SHARP

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# Simulation-based **H**olistic **A**pproach to **R**educing and **P**reventing knife violence

Performing surgery  
through simulation

# SHARP

SIMULATION-BASED HOLISTIC APPROACH FOR REDUCING &  
PREVENTING KNIFE VIOLENCE

## SUMMARY

[www.sharp-project.org](http://www.sharp-project.org)

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## Regional Knife Crime Data

16%

increase in Met Police recorded offences involving a knife or sharp instrument in London in the last year (up to March 2024)

14%

increase in knife or sharp instrument offences recorded by South West police forces in the last year (up to March 2024)

3%

increase in knife or sharp instrument offences recorded by Police in Wales in the last year (up to March 2024.)

Source: Office for National Statistics

## Hospital admissions

3,888

the number of admissions into NHS hospitals in England and Wales for assault by a sharp object in the year ending March 2024.

1,439

hospital admissions for young people aged under 24 in NHS hospitals in England and Wales for assault with a sharp object in the year ending March 2024.

25%

decrease in hospital admissions in NHS hospitals in England and Wales for assault with a sharp object since March 2019 (year ending March 2024)

Source: Office for National Statistics

## Knife Crime Data for England and Wales

4%

increase in Police-recorded offences involving a knife or sharp instrument in the last 12 months (up to March 2024)

50,510

Police-recorded offences involving a knife or sharp instrument (up to March 2024)

78%

increase in Police-recorded offences involving a knife or sharp instrument in the last 10 years (up to March 2024)

Source: Office for National Statistics

Knife murders

233

murders involving a knife or sharp instrument in England and Wales in the 12 months to March 2024.

78

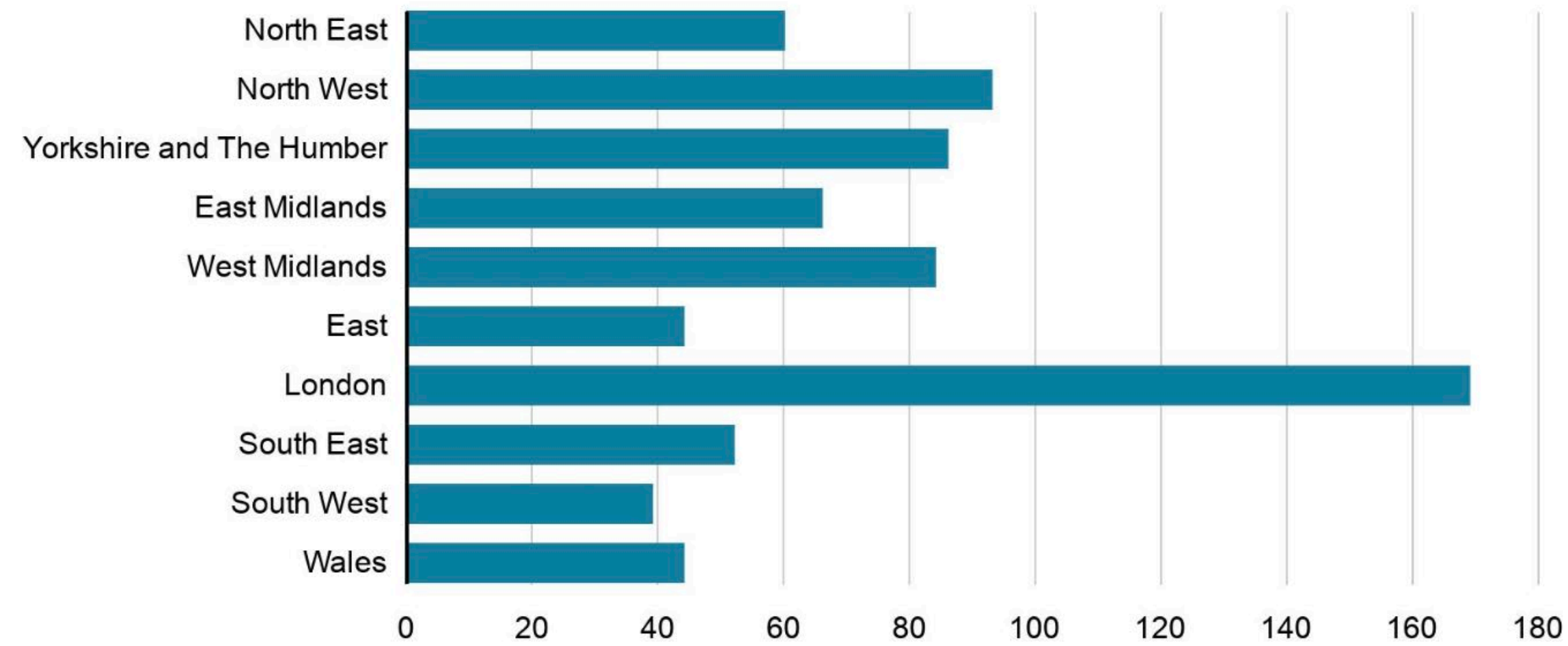
young people aged under 25 were murdered with a knife or sharp object in the 12 months to March 2023. 10 were aged under 16.

Source: Office for National Statistics

# BACKGROUND

## Regional variation in knife crime offences

Knife offences per 100,000 people by region, England and Wales, year ending March 2019

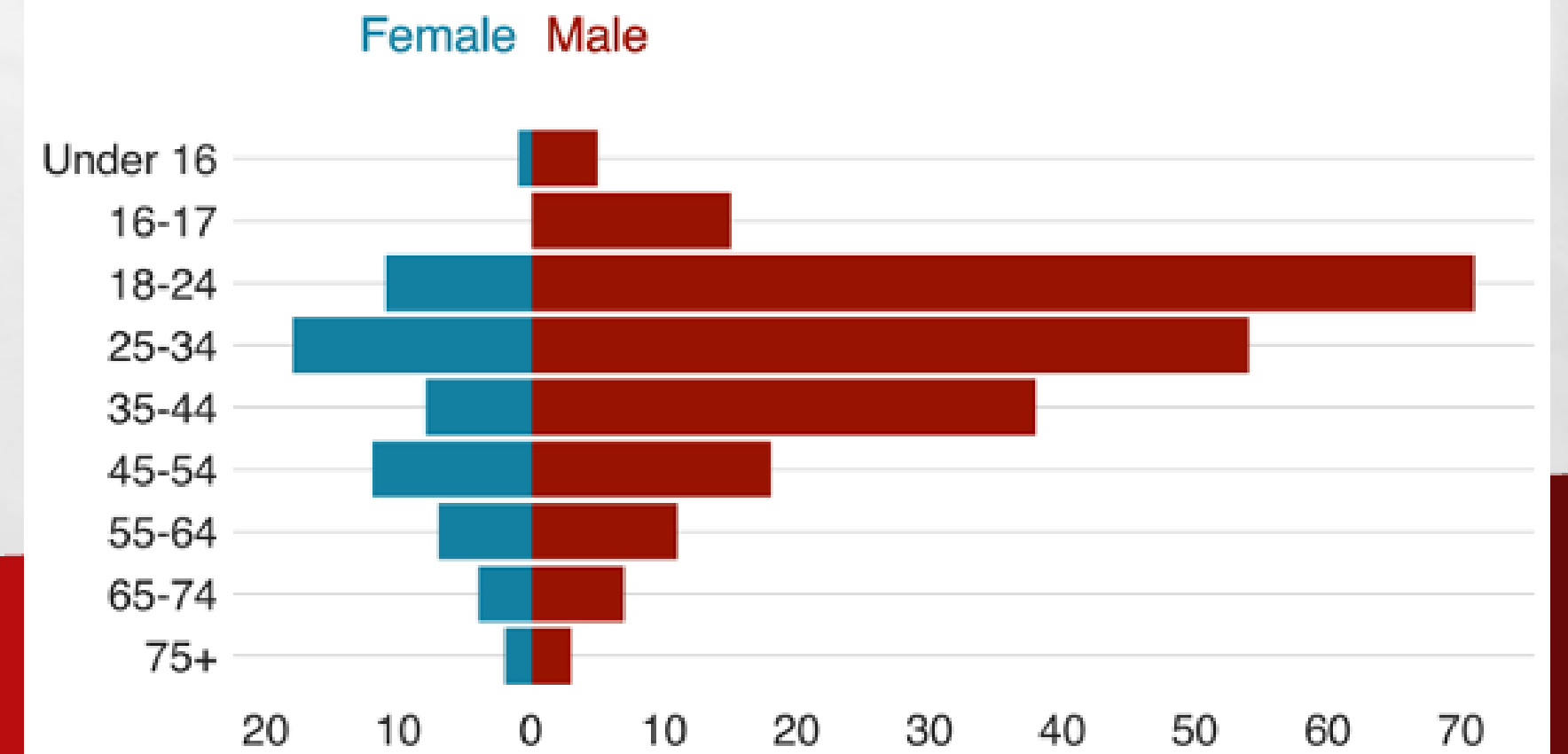


Source: Home Office

BBC

## Those stabbed to death are predominantly young men

Number of people killed in England and Wales in 2017-18 by age



Source: Office for National Statistics

BBC

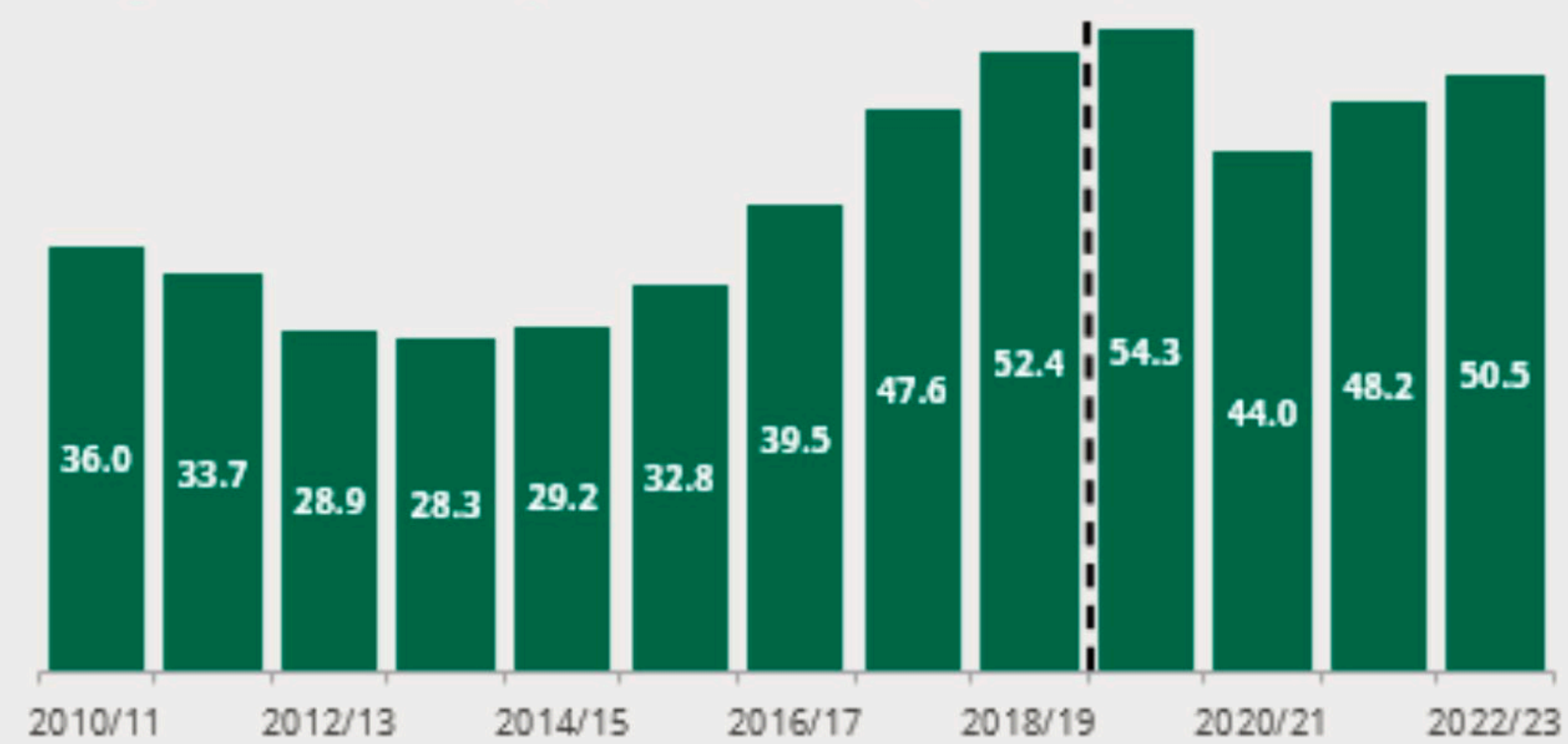


# BACKGROUND

Knife crime statistics: England and Wales

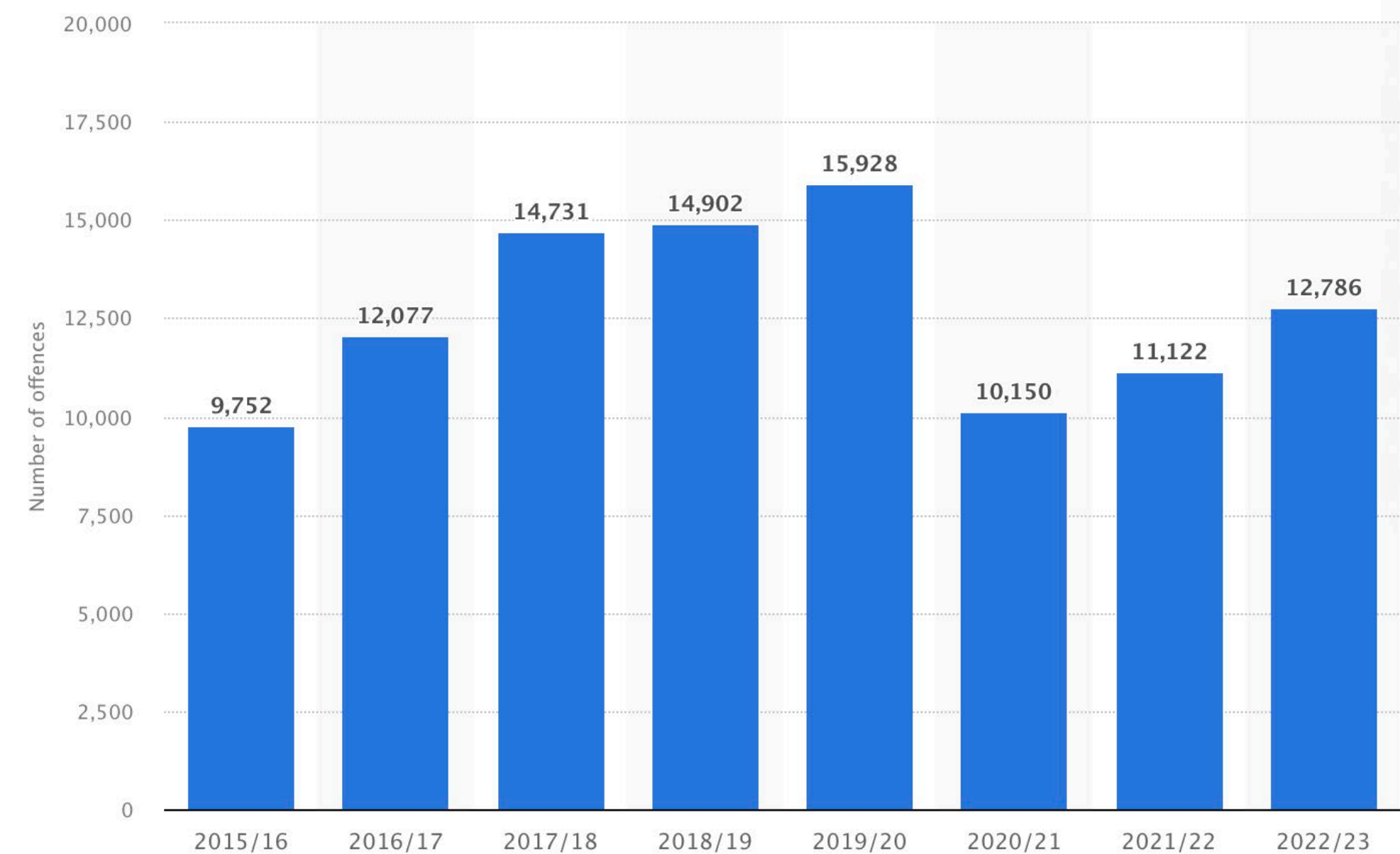
## Selected offences involving a knife or sharp instrument

Year ending March, England and Wales, including Greater Manchester and from year ending March 2020 excluding Devon and Cornwall (thousands)



Source: ONS, [Crime in England and Wales: Other related tables](#), Table F3a, 20 July 2023 (accessed 11 October 2023).

Number of police recorded knife or sharp instrument offences in London from 2015/16 to 2022/23



© Statista 2024

[Additional Information](#)

[Show source](#)

Adam's story  
through VR & art

# PROJECT AIMS



We aim to work in partnership with young people to increase their understanding of the topic of knife violence and its impact on individuals and communities. We endeavour to support young people to make safe and informed choices that protect them from involvement in knife violence.

To do this, we seek to help young people develop new skills, including:

## Impact

An increased understanding of the physical, emotional, and psychological impacts of knife violence

## Response

An increased understanding of what to do if they witness a knife crime and how to respond safely

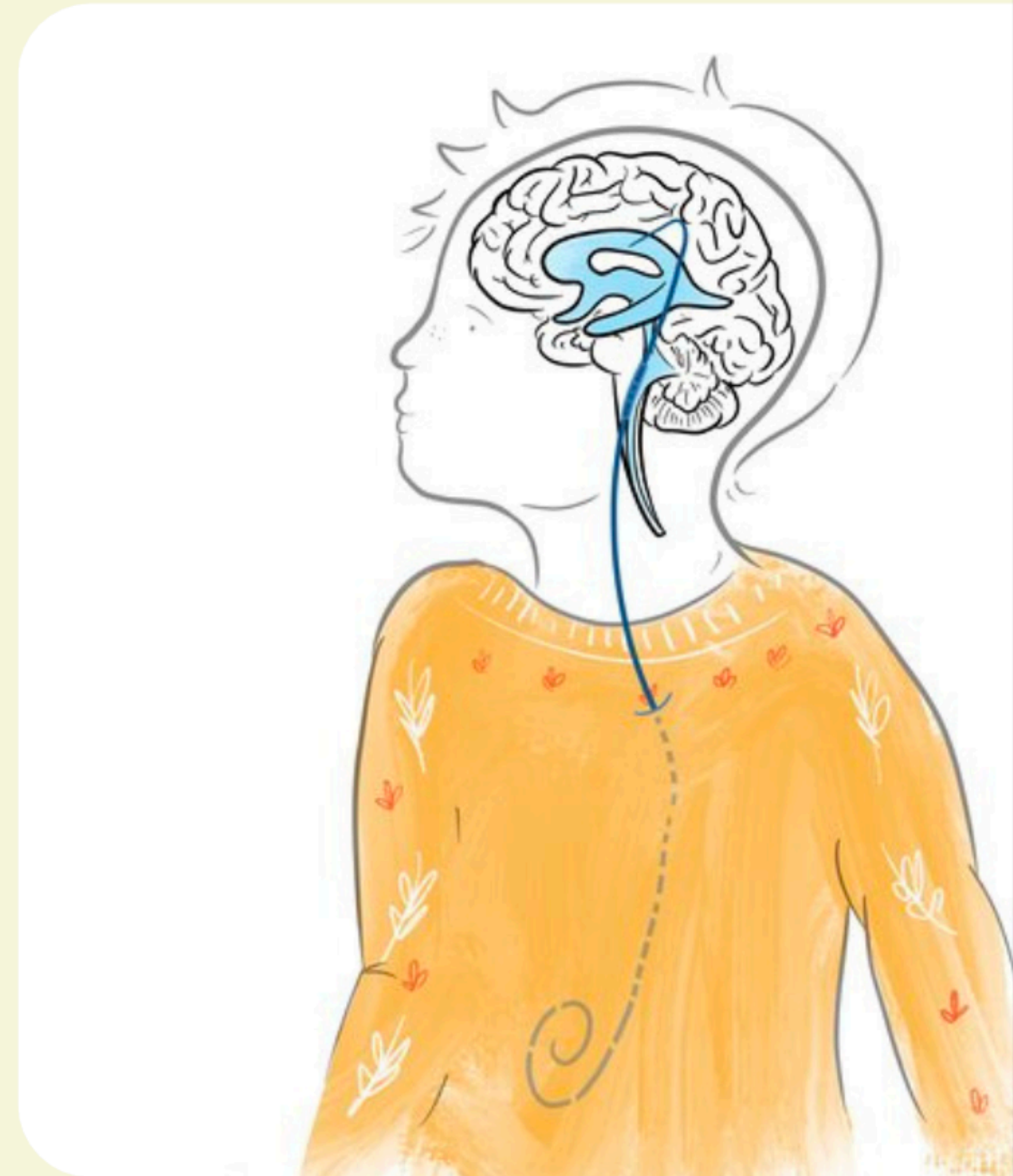
## Explore

The ability to engage in peer support work that gives young people more confidence to explore alternatives to knife-carrying behaviour.

## Knowledge

Knowledge of alternative curricular and extra-curricular activities available to them and increased involvement in community-based after school programmes

At the same time, we want to learn from young people, to understand their experiences and to better reflect their needs at a community, academic, and policy level.









# WITNESSING

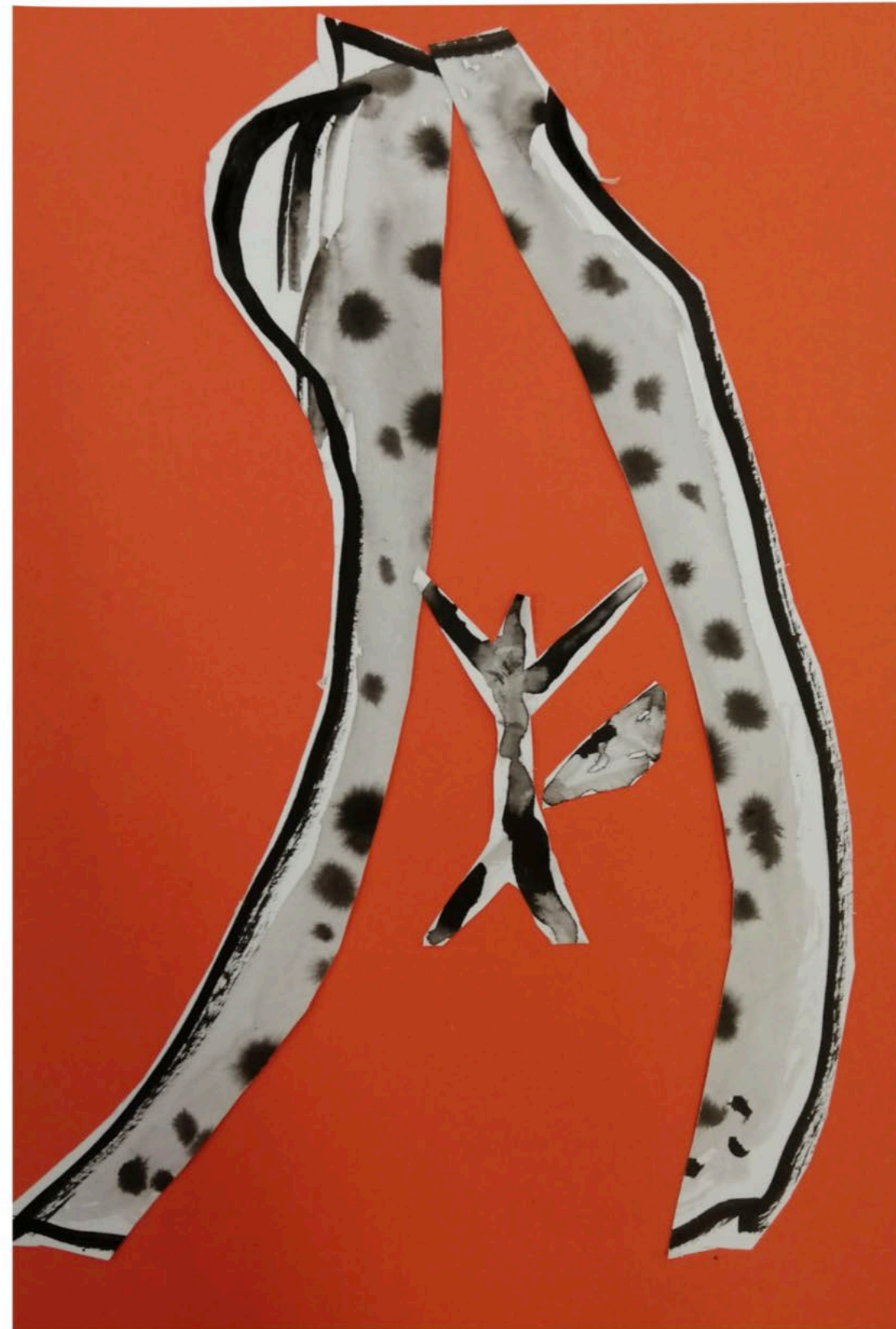


THE TWO SIDES





# THE TWO SIDES



Adam's story  
through physical simulation















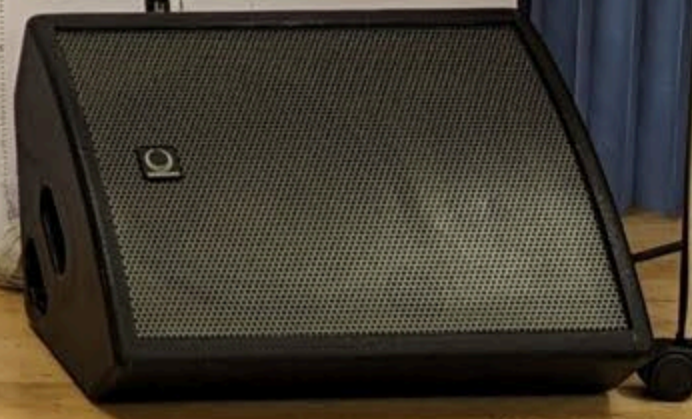
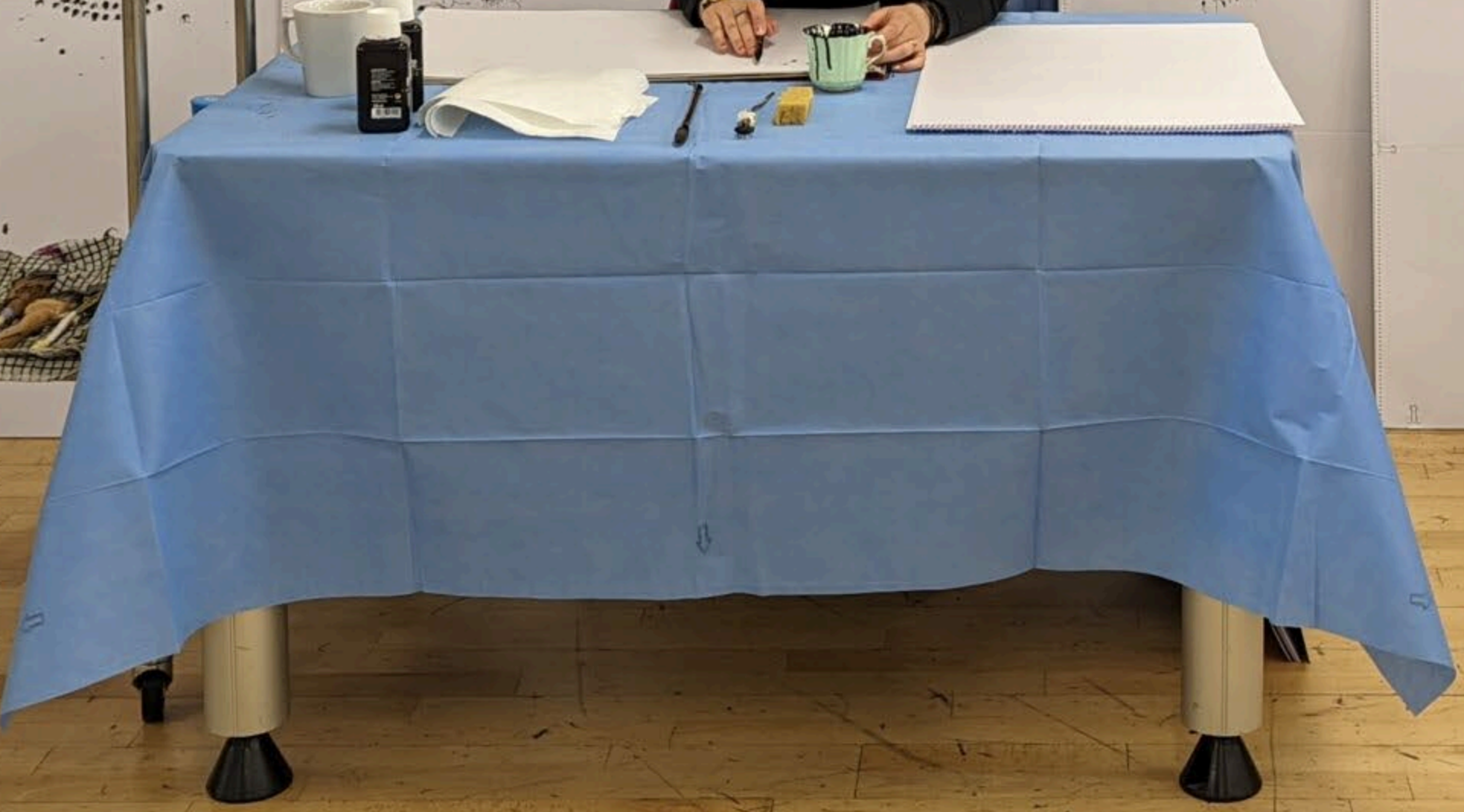
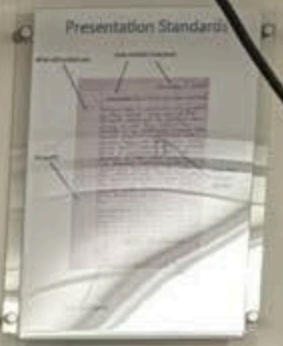
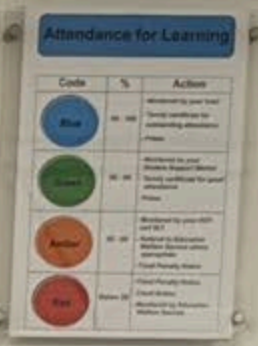








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# PARTNERS



The SHARP Programme is an initiative from the **Imperial College Centre for Engagement and Simulation Science (ICCESS)** currently funded by the Mayor's **Violence Reduction Unit (VRU)**.

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**VRU** | MAYOR OF LONDON  
VIOLENCE REDUCTION UNIT

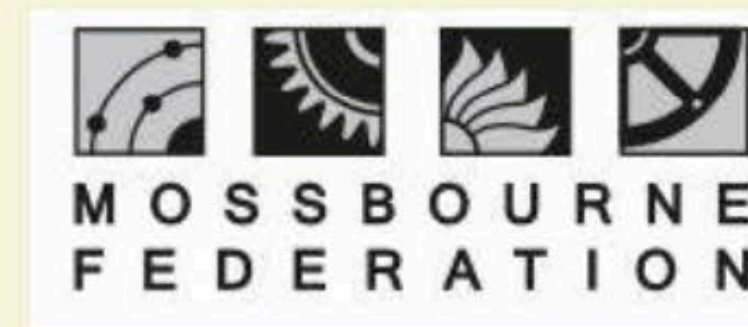
The **Youth Endowment Fund** funded a feasibility study of the SHARP project in collaboration with our charity partners, the **Prince's Trust**, and **The Change Foundation**. The feasibility was independently evaluated by **Ipsos MORI**.



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# SCHOOLS & YOUTH CLUBS - 2021-23



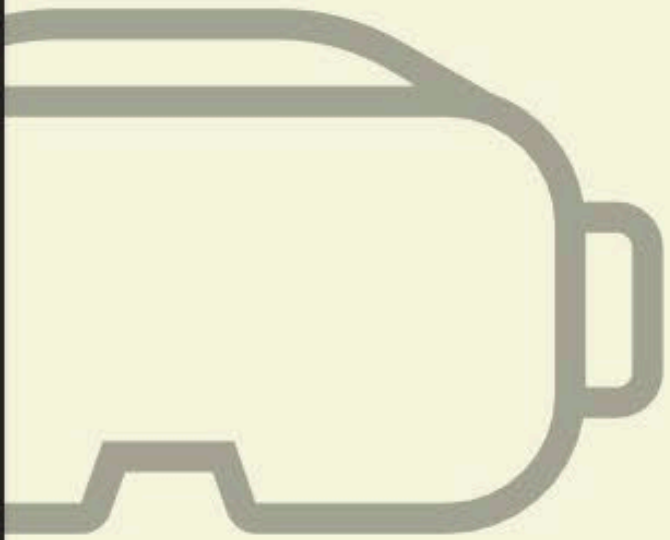
# PHASE I



Phase 1 workshops combine state-of-the-art **Virtual Reality** simulation with **traditional drawings** and **collage-making** to inspire the students to address the challenging issue of knife violence and how it affects them in their daily lives.



The **VR immersive experience** is followed by a debrief session led by a **Surgeon**. Participants then move to the **art session** led by our **Medical Illustrator** who elicits emotional responses to the VR, exploring the understanding of knife violence and prevention. Phase 1 workshops typically last half a school day.



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# PHASE II

The activities in Phase I are designed to cover all the core objectives of the programme. Phase II acts as a reaffirmation, consolidating learnings and providing sufficient intensity to achieve the learning outcomes.

Phase 2 workshops are a full school day, divided as follows:

## Hands-On

Young People spend time with Surgeons, Paramedics and Nurses to gain a fuller understanding of each role



## SqS™

We bring Adam's journey to life with a live Sequential Simulation or SqS™ consisting of real healthcare professionals and Simulated Patients (trained actors)



## "Somebody"

Combining both the physical and the psychological aspects of knife violence in a performance with a textile body.



## Young Ambassadors

A discussion about the "mental consequences" of knife violence from young ambassadors with real life experience.



## Support Hub

Discussion and Exploration of support offered by local communities and our charity partners



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## Reaching the Community

**In addition to the school workshops, we have conducted extra workshops with The Change Foundation at the Harrow Club and Chelsea Football Club Academy**

We took the opportunity to reach out to communities from deprived backgrounds through The Change Foundation and **The Harrow Club** as well as communities outside of the school environment like **Chelsea Football Club Academy**.

**Press coverage: [Imperial College Press](#) and [BBC News Article](#) - [BBC News Segment](#)**

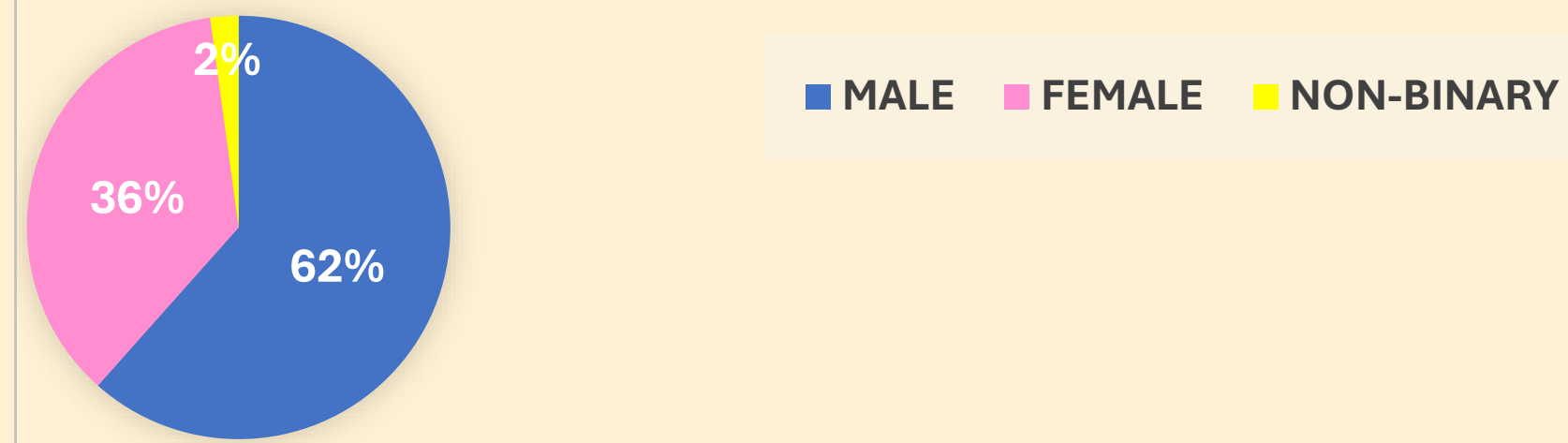


# RESULTS

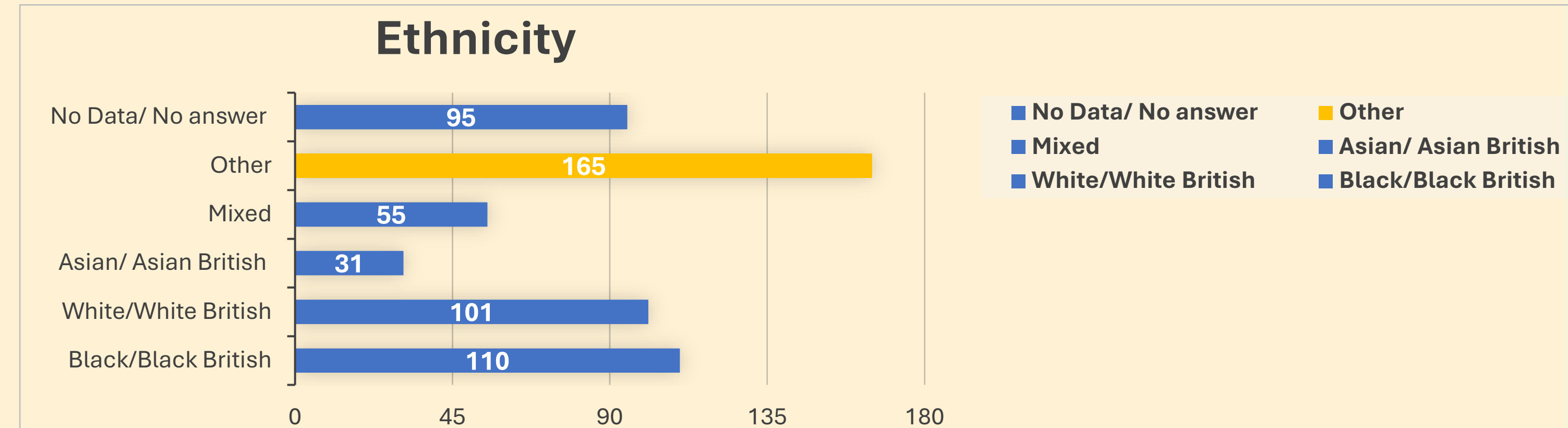


## DEMOGRAPHIC

### Gender



### Ethnicity



## PARTICIPANTS

# 557



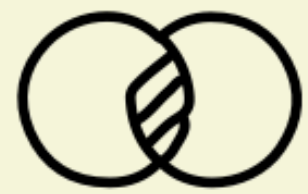
**PARTICIPANTS: 557**  
**SCHOOLS: 15**  
**YOUTH CLUBS: 2**  
**AGE RANGE: 11-16**  
**MEDIAN AGE: 13**



The report from our external evaluator **IPSOS MORI** highlighted the following:



SHARP successfully **exceeded targets** for **recruiting schools** and number of **participants**



A general consensus that SHARP provided an **unique, impactful** and **relevant** experience for the schools and was **engaging** for young people



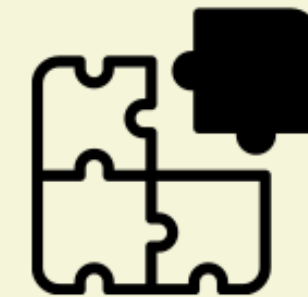
Young people reported increased confidence in knowing what to do if **witness a knife attack**



Teachers and young people reflected that the workshops **imparted powerful messages** relating to the long-term **emotional** and **physical** impacts of knife violence



The opportunity to use **virtual reality** was a **key factor** in **engaging** young people



The effective delivery of SHARP was supported by ensuring the content was **locally relevant, innovative, multi-disciplinary**, and allowed for **iterative improvements**



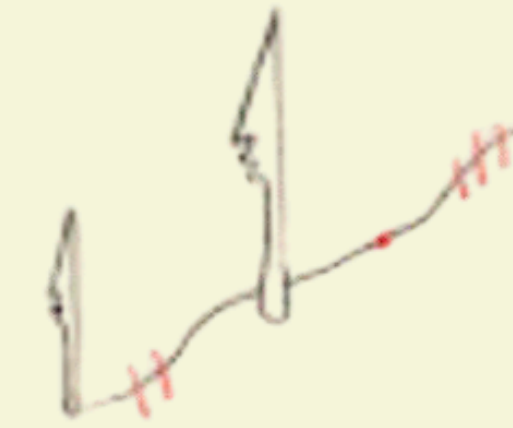
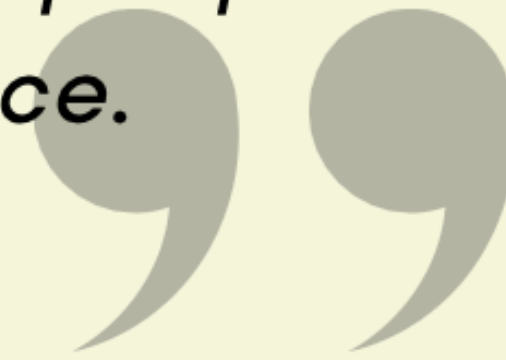
Survey results suggested the program had a **greater impact** on **girls' confidence** in responding to **knife violence**, possibly due to girls having received **less prior guidance** on the issue compared to boys



The clear need for **SHARP**:



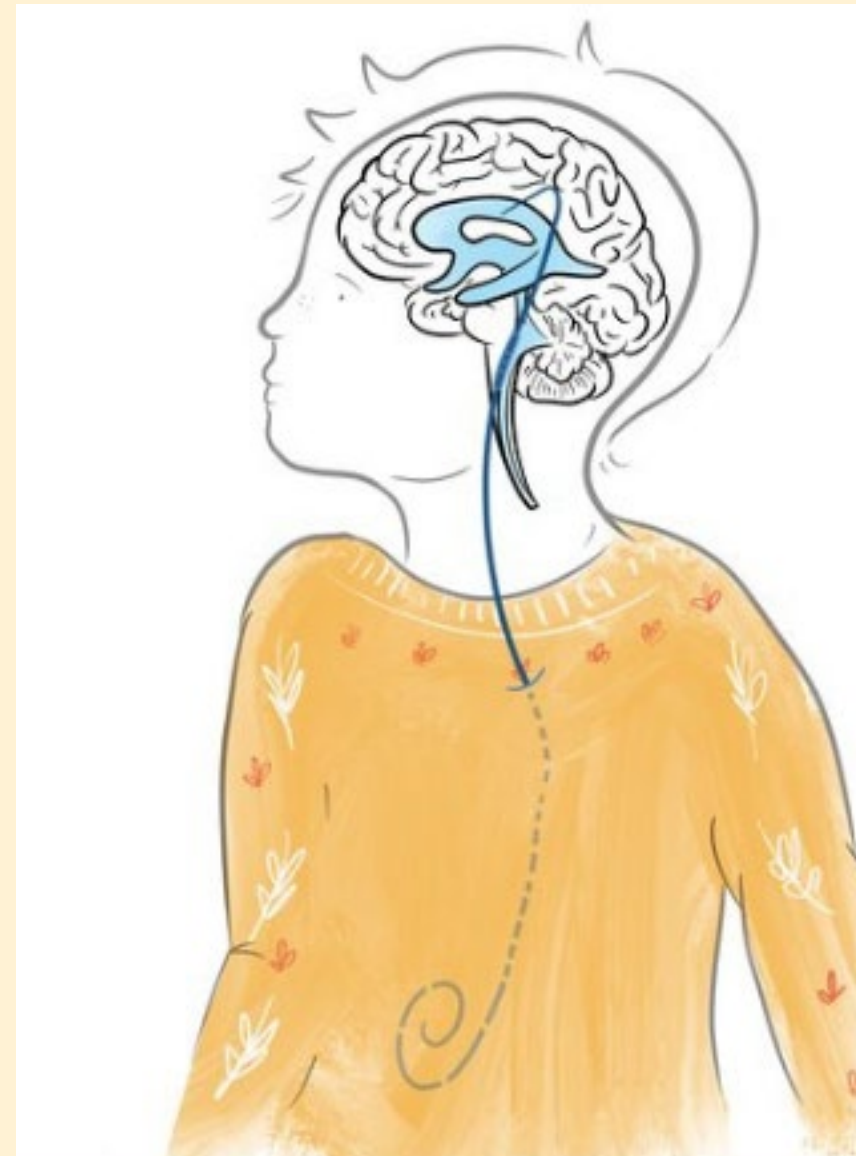
*There was a widespread view among teachers that there is a clear need for the SHARP project given the prevalence of knife violence among young people in their areas. Teachers also mentioned the lack of provision for knife violence prevention in schools or with young people who have been affected by knife violence.*



# OUTCOMES

## Short-term outcomes:

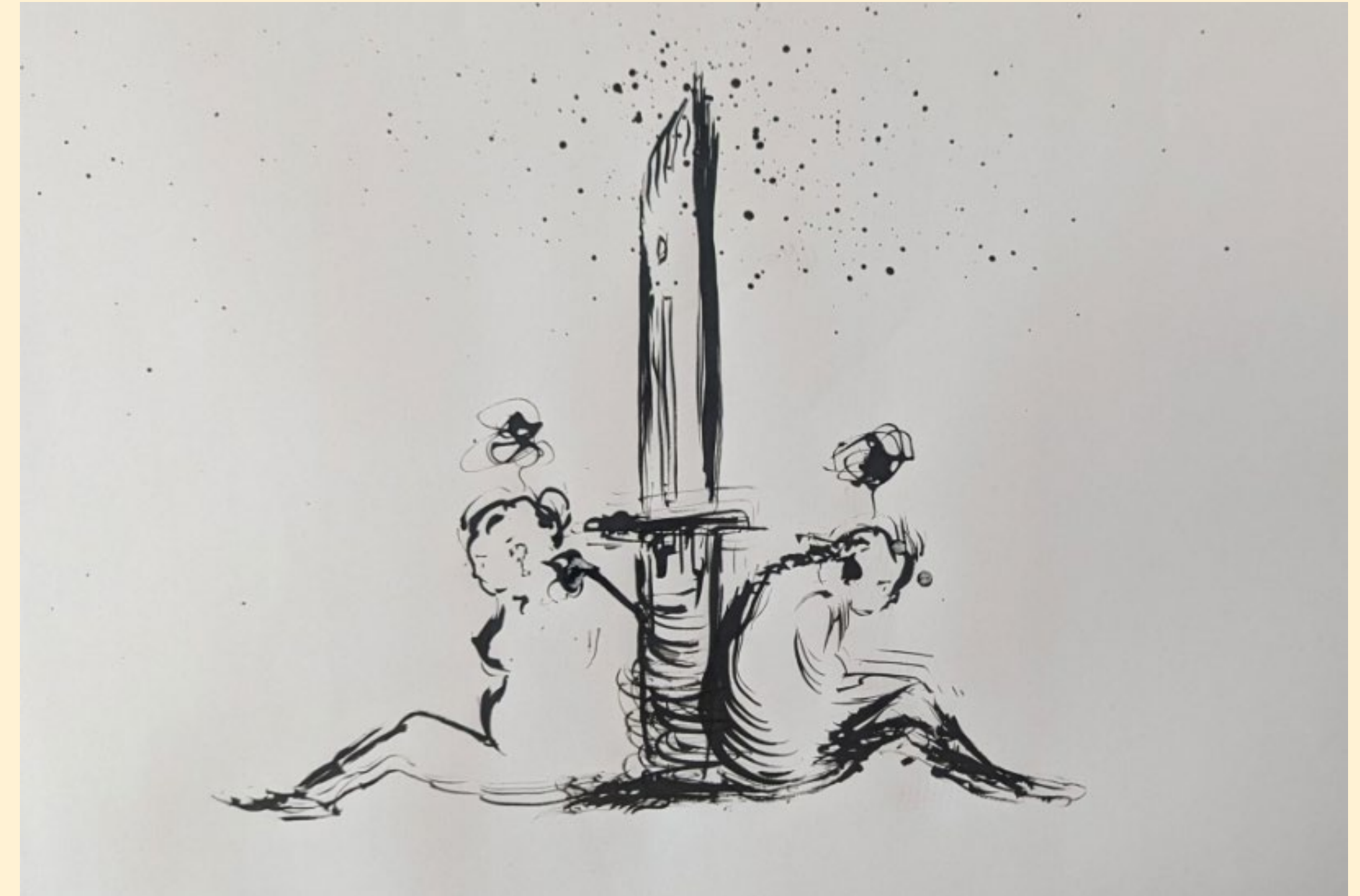
- Understanding knife violence impacts
- Witness response awareness
- Emergency services insight
- Emotional awareness growth
- Alternative activity access

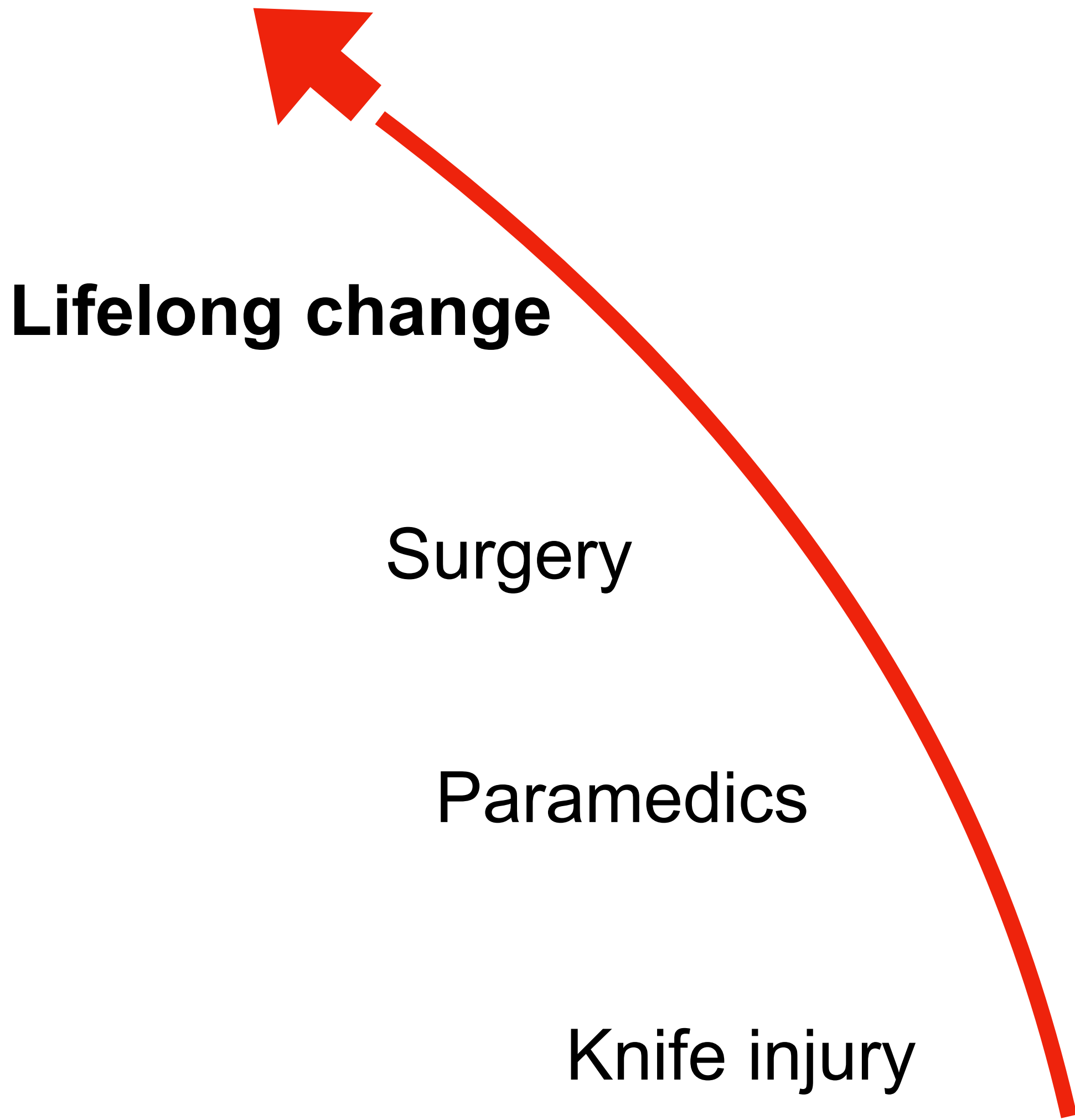


# OUTCOMES

## Long-term outcomes

- To have greater understanding of the impact knife crime and the confidence to make informed choices.
- Reduction in the number of young people carrying knives around areas of intervention
- Reduced risk of harm to self and others
- Develop the criminal justice pathway





SHARP Health



SHARP Justice



**Lifelong change**

**Lifelong change**

Surgery

Prison

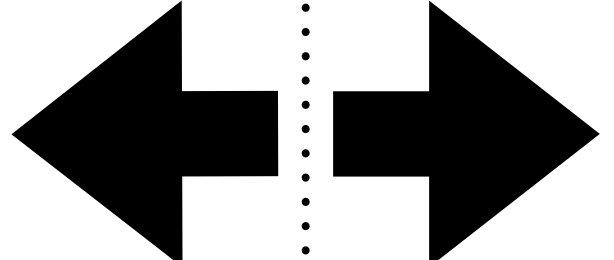
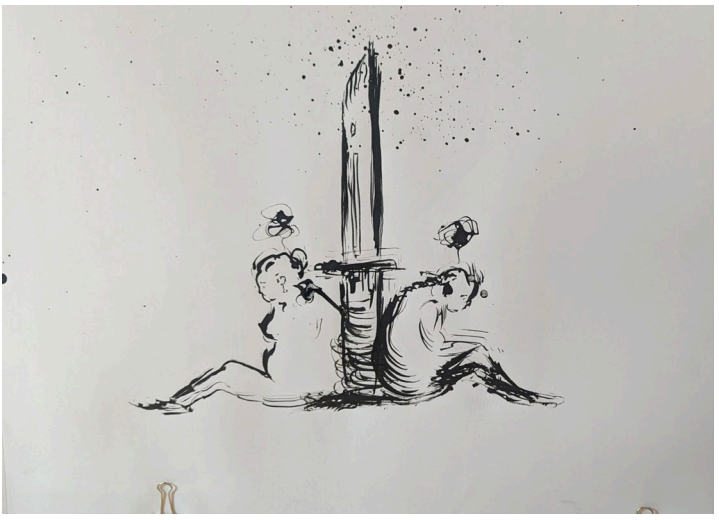
Paramedics

Court

Knife injury

Arrest

Attack



**SHARP Health**

**SHARP Justice**

# A public health intervention

# PRELIMINARY INTERNAL DATA ANALYSIS



## Summary:

Analysis of the data shows that *young people*:



...have a better understanding of the impacts of knife violence, including the **physical** and **psychological** impacts.



...have improved understanding of issues related to **harm & exploitation**



...have a better understanding of what to do if they **witness a knife attack**.



...improved ability to **respond to stress** or **trauma**.



...have an increased **understanding** of the work of **emergency services** and **clinicians** during a knife attack.



...have an increased understanding of their **emotions** and **feelings** surrounding **knife violence**.

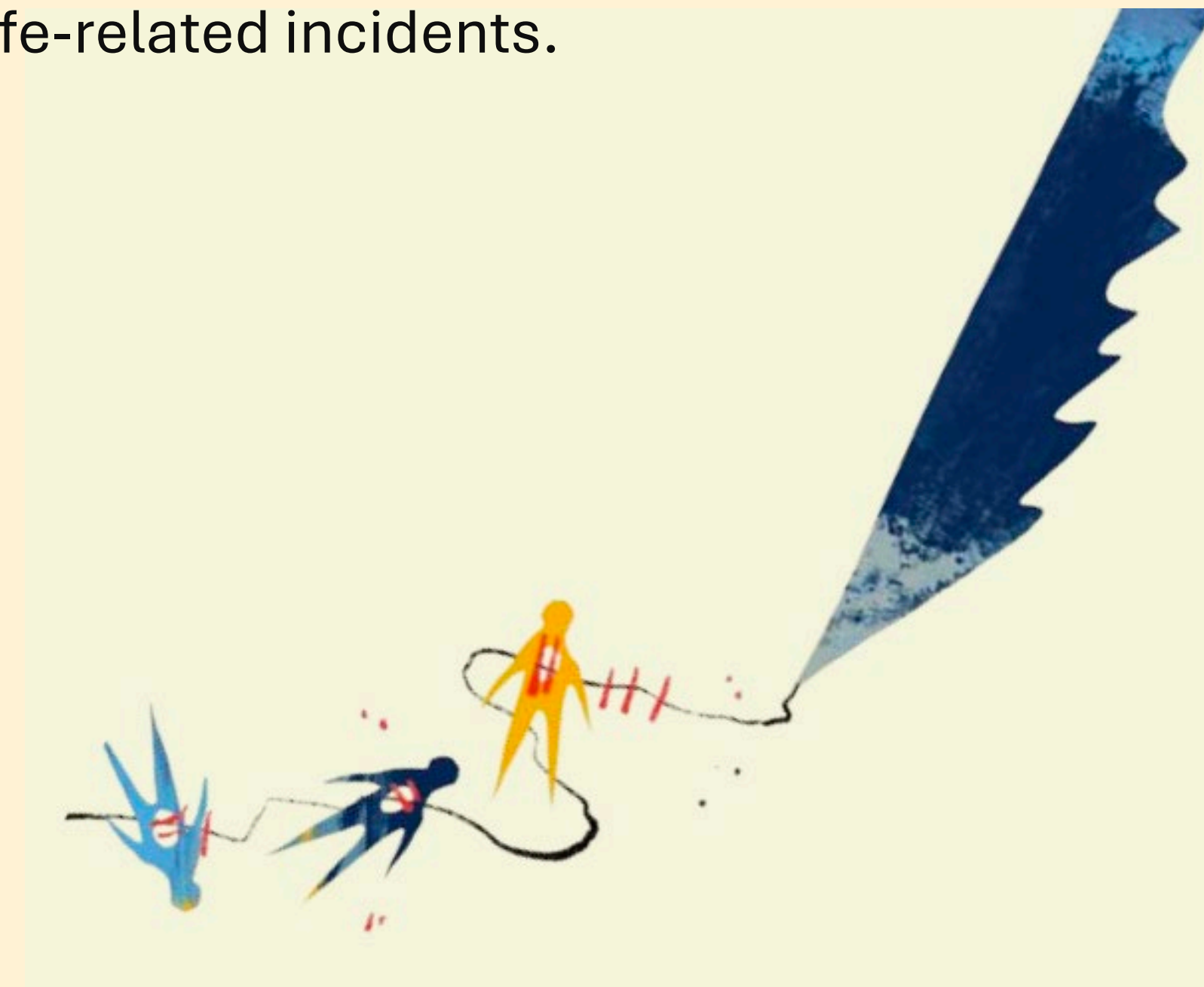


...knowledge of how to **access alternative activities** after school or in school holidays

# ON THE HORIZON

## Criminal Justice Pathway

- The next phase of our work, the SHARP: Justice programme, will take a comprehensive approach to understanding the full trajectory of those involved in knife-related incidents (the attack), focusing on both prevention and consequence.
- The SHARP-Justice program will focus on preventing and understanding knife crime, showing the legal and emotional journey from arrest to sentencing. Using Sequential Simulation, participants will learn key interventions to prevent violence and gain insight into the decisions and consequences of knife-related incidents.



# SHARP

SIMULATION-BASED HOLISTIC APPROACH FOR REDUCING &  
PREVENTING KNIFE VIOLENCE

**THANK YOU**

Next steps in Switzerland  
and beyond ...