

Dissertation Title:

**Emergency Medicine Registrars' Attitudes  
towards Youth Violence Prevention Interventions  
in Cape Town Emergency Centres**

Cape Town Emergency Medicine Doctor  
Youth Violence Prevention Study

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Above research was completed in partial fulfilment of the MMed Degree in  
Emergency Medicine at the University of Cape Town.

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# **Emergency Medicine Registrars' Attitudes towards Youth Violence Prevention Interventions in Cape Town Emergency Centres**

## **Cape Town Emergency Medicine Doctor Youth Violence Prevention Study**

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This study is in partial fulfilment of the M.Med. Emergency Medicine degree

### **Declaration:**

I, Martin de Man, hereby declare that the work contained in this assignment is my original work and that I have not previously submitted it, in its entirety or in part, at any university for a degree.

Signature:

**Signed by candidate**

Date: 5 May 2016

## A word of thanks:

I, Martin de Man, want to take the opportunity to thank everyone for their support with this study:

- Prof Catherine Ward, for clear guidance and friendly support with every stage of the process.
- Dr Heike Geduld, for her day to day support and encouragement to keep on going with each draft.
- A special word of thanks to my wife, Mari de Man, who is also the official research assistant, for patiently listening to all the research ideas in the start, supporting with every focus group gathering, and transcribing the discussions so accurately and diligently.
- My fellow Emergency Medicine registrars willing to give of their time to come to the focus group discussions and passionately discussing this topic that is close to many of our hearts.

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# Part A:

# Research Protocol

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## **Title: Cape Town Emergency Medicine Doctor Youth Violence Prevention Study**

### **Summary**

The City of Cape Town has a large youth violence problem with the highest percentage of non-natural deaths per age group in Cape Town occurring between 15 and 24 years of age<sup>1</sup>. Many authorities suggest that youth violence is preventable. The health seeking behaviour of youth makes the Emergency Centre (EC) a reasonable place to implement preventative interventions. As pinnacle providers of curative care for youth violence victim-perpetrators or victims, for emergency physicians not to think about preventative strategies that can effectively be utilised in the EC, demonstrates a lack of engagement in the realities of life that our patients and communities face. This study will aim to gain a broad knowledge base of current youth violence prevention interventions used in EC's internationally. It will explore the attitudes and perceptions of Cape Town Emergency Medicine (EM) doctors towards youth violence prevention. This study will lay the groundwork for the development and implementation of evidence-based and appropriate youth violence prevention brief interventions in the EC's of Cape Town.

### **Background and Rationale**

It is a well publicised fact that Cape Town has a large gang violence problem<sup>1</sup>. A life-threatening gunshot to the chest, a disfiguring deep laceration over the face, or a debilitating hemi-dissection of the spinal cord, in combination with illicit drug abuse, sexual assault and the innocent bystander factor, are familiar scenarios. Those who work in the Emergency centres (EC) experience the destructiveness of youth violence daily. Western Cape provincial police commissioner, Arno Lamoer, in a recent interview stated that for the 2014 period 18% of murders for the province were gang-related including children killed in the crossfire and gangsters who kill one another<sup>2</sup>.

In 2011, the highest percentage of deaths due to non-natural causes in Cape Town occurred in the age group 20-24 at 58.3%, closely followed by age group 15-19 at 57.6%. It is only in these two age groups where the percentage of non-natural causes of death was higher than that of

natural causes. In the age group 15–29, for the City of Cape Town, 9.9% of the non-natural deaths were due to assault<sup>1</sup>. This illustrates the high burden of youth violence in this area.

The National Youth Policy 2009-2014<sup>3</sup> defines youth as young people falling within the age group of 14 to 35 years. This more inclusive definition was chosen in an attempt to right some of apartheid's wrongs in allowing a broader plan for development and education. The United Nations<sup>4</sup> defines 'youth' as between the ages of 15 and 24 years. But, it is also recognised that around the ages of 11 or 12, gang involvement may already place these young people at risk of committing or being a victim of violence<sup>5</sup>. The Red Cross War Memorial Children's Hospital in Cape Town<sup>6</sup> defines children as patients up to and including 12 years of age. Given the age cut-off model in the Western Cape, for the purposes of this study the definition of 'youth' will refer to individuals between the ages of 13 to 24 years.

One of the objectives of the National Youth Policy mentioned above<sup>3</sup> is stated as follows: "To create a safe environment free from discrimination, abuse, in which young people are protected from being exposed to forced or voluntary participation in crime and violence". One of the core elements of this policy is the tenet that development interventions should seek to promote the wellbeing of young people by putting in place measures to address their needs, thus reducing their vulnerability. The Department of Health and Social Development should provide young people with relevant information to reduce the likelihood of risky behaviour such as violence. All of the above speak to potential areas of partnership with health care facilities and workers. As frontline healthcare workers we have a responsibility to this vulnerable population and should seek innovative ways to support youth violence prevention.

Ward et al.<sup>7</sup> in "Youth Violence: Sources and Solutions in South Africa" give a clear and current picture of the situation in South Africa, and specifically in Cape Town. Potential interventions identified include youth violence prevention in the early years, school-based interventions, interventions for out-of-school contexts, intervening with youths in gangs (including prevention, disengagement and suppression programmes), diversion programmes for young offenders, and addressing youth violence in cities and neighbourhoods. However little is said about EC interventions.

According to the 2011 General Household Survey, the majority of households in South Africa seek medical help from public health care facilities, with the Western Cape proportion being 52.5%. In South Africa 64.2% of people between 15 and 24 years of age do seek health care when ill or injured<sup>8</sup>. It is thus fair to say that the majority of victims of youth violence will present to the EC at some point.

Youth violence intervention programmes can be classified into three categories<sup>9</sup>:

- 1) Primary prevention (universal, population-level programmes designed to prevent a particular problem from occurring),
- 2) Secondary prevention (programmes targeting youths who are at risk of a poor outcome e.g., children who have been abused or exposed to high levels of violence),
- 3) Tertiary prevention interventions (targeted programmes for youths who are already displaying the target behaviour e.g. young people committing a violent offence).

At the time of an EC intervention programme it is most likely that the youths seen there would already have been exposed to violence and thus the secondary and tertiary prevention strategies would be most relevant. One of the main challenges for EC-based interventions would be the so-called 'dose' phenomenon, where violence prevention interventions are more likely to be effective if there is repeated contact sessions with the victim-perpetrator or victim (7). While youth victims of violence may present to the EC, there is no regularity to these presentations and thus repeat sessions are unlikely. A number of EC based brief interventions are described in the literature such as the US-based SafERteens initiative which uses a combination of face-to-face contact with a therapist and use of a computer based intervention to allow the exploration of complex issues in a short time<sup>10</sup>. There are at least 20 Hospital Violence Intervention Programmes (HVIP) across the United States and a few across Europe, which have been shown to be variedly effective in terms of cost-benefit, reducing risk, re-injury and retaliation and other parameters of youth violence prevention<sup>11</sup>.

### **Why this project is worth doing:**

EC staff are often overburdened and numbed by the clinical burden of the victims of violence. In the writer's opinion, staff regularly expresses their dissatisfaction with the senseless violence they daily face and deal with on a curative level. The EC provides a unique opportunity to make

contact with this vulnerable population and offers an opportunity for a social intervention that may have significant consequences.

As shown above, 50% of youth deaths are due to non-natural causes. Cape Town has a substantial youth population, the majority of whom seek help at health care facilities when they are ill or injured. There is a growing body of work and national momentum in the field of hospital based youth violence prevention interventions, making this a topical and important area for research.

In order to utilise this opportunity most effectively it is important to understand the challenges facing EC staff, their perceptions of youth violence (the victims and perpetrators) and their willingness to engage in youth violence prevention interventions in the EC. If we are to develop an EC based youth violence prevention initiative, this will have to be championed by Emergency Medicine (EM) doctors.

This study will be able to pave the way for future research that may include training recommendations for EM doctors in terms of youth violence prevention, or validating and eventually implementing potential youth violence prevention brief interventions in our local EC setting.

**Research Question:**

What are Cape Town Emergency Medicine doctors' perceptions of youth violence and their attitudes around their role in youth violence prevention?

**Specific Aims:**

To explore the perceptions and attitudes of Cape Town emergency medicine doctors on youth violence and their role in youth violence prevention and how it applies to their work in the EC.

## **Methodology**

### ***Study design***

The study will consist of 3 - 4 focus groups of 6-8 of Emergency Medicine registrars. This will sample 40-71% of EM registrars (total of more or less 45 depending on time of study) in Cape Town and is highly likely to be representative of this group. Focus groups will be used to elicit EM registrars in Cape Town's perceptions on the study topic (see addendum 1 for detail on focus group questions). Questions will explore general attitudes towards youth violence, youth violence prevention, barriers to and facilitators of the emergency doctor's role in it, and time and energy willing to be spent on youth violence prevention in the EC per patient. The amount of focus groups will depend on when data saturation in terms of the qualitative research method is reached.

### ***Study population and sampling***

Population Inclusion criteria: Current emergency medicine registrars and emergency physicians involved in the combined Universities of Cape Town and Stellenbosch Emergency Medicine MMed programme will be asked to participate. They will be identified from the Emergency Medicine registrar contact list of the Division of Emergency Medicine. Participation will be on a voluntary basis, informed consent will be taken (see addendum 2) and all data will be anonymised by only referring to participant 1 etc and not by name. If names are used in recordings, these names will be taken out already in the transcribing of the focus group discussions. Participation in focus groups will be done in participants' personal capacity and not as representatives of their respective hospitals. Sampling of participants will be via simple randomisation. It will be done through the EM registrar contact list being numbered and then a number draw of participants present being done at the conclusion of the afternoon training session. As a participant's number is drawn, the participant will be asked if he or she will be able to participate that day and if not, another participant will be drawn until there are at least 6 participants for the session. The focus group will be able to start after non-participating EM registrars have left the training facility, and after consent has been taken.

Exclusion criteria: Foreign medical students, interns and medical officers will not be asked to participate, as the study is focussing on senior medical doctors with an overview of different health care facilities in Cape Town. Emergency Medicine registrars rotate every 3 to 6 months to a different hospital in their 4 year training period.

### ***Measurements***

There will be two facilitators at every focus group. The lead facilitator will facilitate the focus group discussion, and a second trained research assistant will partner to do verbatim transcription, audio recording and overall timekeeping for the focus group. We will use qualitative focus group discussions to explore attitudes towards youth violence prevention. In the design of the semi-structured focus group questions, we will aim to be inclusive in exploring all of the broad categories of attitude formation including cognition, affect and behaviour<sup>12</sup>.

### ***Data management***

Informed consent will be obtained prior to the focus groups, including for recording the discussions. Data will be password protected and only two persons will have access to this data during the study. Audio recordings will be transcribed and then destroyed to eliminate identification of participants. Raw data in a scanned format and a transcribed version of audio recordings without personal identifiers in electronic format will be kept for five years after publishing of the study by the principle investigator only, and will again be password protected.

### ***Data Analysis Plan***

In essence, a qualitative thematic analysis will be carried out on the focus group data sets as is described by Braun and Clarke (Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2). pp. 77-101. ISSN 1478-0887). Focus group audio recordings will first be transcribed, then data from the first focus group discussion will be hand-coded, and initial themes will then be identified by the research team. These themes will be consolidated when analysing the second focus group discussion. Triangulation will be done in terms of different team members involved in the coding process and identifying of themes. Important themes will be organised into different formats e.g. simple tables, map diagrams, or matrices to aid in proper analysis of the data.

## Ethical considerations

For those participating in the focus groups written consent will be obtained prior to the focus group (please see addendum 2), wherein it is made clear that consent is given for participating in the study and recording of the focus group discussions. Throughout the analysis and reporting stages anonymity will be maintained as described above. Prospective participants will be free to decline participation as the randomisation process is set up in such a way that will allow participants to decline participation when their name is drawn. It will be made clear that participants participate in their personal capacity and on a strictly volunteer basis, not as students of a tertiary institution or as government employees. Their opinions will thus also not reflect the official views of these institutions.

## Strengths and limitations

One of the strengths of this study is its simplicity. It aims to explore perceptions and attitudes of EC doctors towards youth violence prevention. A possible limitation is that it is limited to an academic pool which is not necessarily reflective of the average EC doctor around the country. This will thus undermine the external validity of the study.

## Data dissemination plan

The study results will be published in a peer reviewed scientific journal in article format for public dissemination. The study article and recommendations will also be made available to all participants.

## Project timeline

2014	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
EM-DRC summary					X							
2015	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
EM-DRC full proposal						X						
Sx-DRC						X	X					
Ethics						X	X					
Literature Review					X	X	X					



1. Statistician	2 hours	0	0	0
2. Research Assistant(s)	Self-funded	0	0	0
<b>Total</b>				<b>1 530.00</b>

## References

1. South Africa. Pretoria. Statistics South Africa. Comparison of the demographic profiles of two cities: Cape Town and Tshwane; 1997–2011 Report-03-09-082011, 2014, p11. Available from: <http://beta2.statssa.gov.za/publications/Report-03-09-08/Report-03-09-082011.pdf>
2. Lamoer: Gang violence a concern. News24 [Internet]. 2014 Sept 22 [cited 2015 April 15]; Available from: <http://m.news24.com/news24/SouthAfrica/News/Lamoer-Gang-violence-a-big-concern-20140922>
3. South Africa. The Presidency. National Youth Policy 2009 – 2014; March 2009; p9 Available from: <http://www.thepresidency.gov.za/MediaLib/Downloads/Home/Publications/YouthPublications/NationalYouthPolicyPDF/NYP.pdf>
4. UNESCO. Learning to live together. What do we mean by “youth”? [Internet] [cited 2014 November 6]. Available from: <http://www.unesco.org/new/en/social-and-human-sciences/themes/youth/youth-definition/>
5. Ward CL, Bakhuis K. Indigenous theories of children’s involvement in gangs: Cape Town’s young people speak out. *Children & Society*. 2009; 24: 50–62
6. Red Cross War Memorial Children’s Hospital Outpatient Clinic Information 2005 Available from: [http://www.westerncape.gov.za/Text/2005/7/red\\_cross\\_outpatient\\_clinic\\_bro.pdf](http://www.westerncape.gov.za/Text/2005/7/red_cross_outpatient_clinic_bro.pdf)
7. Ward CL, Van der Merwe A, Dawes A, editors. *Youth Violence: Sources and Solutions in South Africa*. UCT Press 2012
8. South Africa. Pretoria. Statistics South Africa. Use of health care facilities and levels of selected health conditions in South Africa: Findings from the General Household Survey; 2011 Report No. 03-00-05, 2013, p9,30. Available from: <http://www.statssa.gov.za/Publications/Report-03-00-05/Report-03-00-052011.pdf>
9. Farrell AD, Flannery, DJ. Youth violence prevention: Are we there yet? *Aggression and Violent Behavior*. 2006; 1: 138–150
10. Cunningham RM, Chermack ST, Zimmerman MA, Shope JT, Bingham CR, Blow FC, Walton MA. Brief motivational interviewing intervention for peer violence and alcohol use in teens: one-year follow-up. *Pediatrics*. 2012; 129(6): 1083-90
11. The National Network of Hospital-based Violence Intervention Programs (NNHVIP) home page. [Internet] [cited 2015 June 23]. Available from: <http://nnhvip.org/mission/#>
12. Hogg, MA, Cooper, JM, editors. *The Sage handbook of social psychology (concise student Ed.)*. Los Angeles, CA: Sage 2007; 123-145

## Addendums:

1. 5 questions that will form the basis for the focus group discussions
2. Consent forms for Focus Group Discussion

## **Addendum 1:**

### **Focus Group Discussion questions:**

A group of 6-8 people will be asked to participate in the focus group discussions. These groups will consist of emergency medicine registrars and consultants. An open discussion forum approach will be used with a primary trained facilitator and a research assistant (Yale Medical student well versed in research methodology).

**Question 1:** In terms of trauma patients, how much violence related intentional injuries do you see in the EC?

*(Exploratory questions if slow response: What is your work distribution in terms of intentional vs. non-intentional injuries? Give more or less a percentage. Do you think it is mostly gang related or not?)*

**Question 2:** What do you think of youth violence prevention?

*(Exploratory questions if slow response: Is youth violence preventable? Is it worthwhile to try and prevent youth violence? Is there someone involved in youth violence prevention in your centre or in the community you serve that you are aware of?)*

**Question 3:** What do you think your role as EM practitioner is in youth violence prevention in the EC?

*(Exploratory questions if slow response: Do you think we as EM practitioners should be doing something in the EC in terms of youth violence prevention? If yes, say how and why. If no, say why not. Do you have a personal experience with youth violence prevention in the EC?)*

**Question 4:** If YVP needs to be implemented in the EC, what will it take to succeed?

*(Exploratory questions if slow response: What do we need in order to do youth violence preventions in the EC? Amongst others, think in terms of place, personnel, costs, training, management, equipment. How do you see your role in implementing YVP interventions in the EC?)*

**Question 5:** There are at least 20 Hospital Violence Intervention Programmes (HVIP) across the United States and a few across Europe, which have been shown to be variedly effective in terms of cost-benefit, reducing risk, re-injury and retaliation and other parameters of youth violence prevention.

Aspects that can be identified are as follows:

- i. These HVIPs consist of a few components and are initiated and driven by an emergency physician, and or trauma surgeons, social workers and then peer volunteers from the community.
- ii. A youth violence victim that has a high risk for re-injury, retaliation behavior, and or high risk for PTSD is identified by the trauma unit personnel.
- iii. Some HVIPs have a computer intervention component in the EC
- iv. Mostly paid or volunteer trained (peer) intervention specialists are contacted, either via the social worker or directly. They see the patient within 24 hours.
- v. Case management including follow-up after discharge is done by these intervention specialists.

Knowing these facts, what is your opinion on the feasibility of such a programme at your facility?

*(Exploratory questions if slow response: What would you see the main challenges be to implement such a programme in your unit? Do you think that taken the right people and enough resources, such a programme might work and be beneficial to your practice?)*

## Addendum 2:



### Consent Form for Focus Group Discussion

Thank you for participating in today's group discussion on Youth Violence Prevention. There are at least 20 Hospital Violence Intervention Programmes (HVIP) across the United States and a few across Europe, which have varied effectiveness in terms of different parameters of youth violence prevention. There are no such intervention programmes in South Africa. The group discussion will explore your views on youth violence prevention, and can help with future planning of work in the area of youth violence prevention in ECs in Cape Town. The group discussion will be recorded for transcribing purposes. It is facilitated by a peer primary facilitator and a second independent facilitator not employed by the health department in order to encourage open discussion. Although the identity of participants initially will be known, all reported data will be kept anonymous. However, due to the fact that participants simultaneously participate in the group, information shared in the focus group discussion cannot be guaranteed to remain confidential. Outside of these factors not in the control of the facilitators, everything possible will be done to protect the identity of the participants during this process and no names or identifiers of persons will need to be published. Databases will be password protected on an access-controlled computer. Before this discussion begins, please feel free to ask any clarifying questions about the process, and after careful consideration, please give your consent below in writing.

#### Who to Contact:

If you ever have questions about this study, you should contact the study Coordinator or the Principal Investigator, **Dr Martin de Man**, cell number 0796822452. If you have questions about your rights as a participant, you may call the **UCT FHS Human Research Ethics Committee** or the supervisors below. The UCT FHS Human Research Ethics Committee can be contacted on 021 406 6338 in case you have any questions regarding your rights and welfare as a research subject.

The Human Research Ethics Committee is situated in the Old Main Building of Groote Schuur Hospital, Floor E52, Room 23, Observatory, 7925

## PARTICIPANT CONSENT FORM

### Cape Town Emergency Medicine Doctor Youth Violence Prevention Study

**University:** University of Cape Town (UCT)  
**Faculty:** Health Sciences  
**Division:** Emergency Medicine

**Student:** Dr Martin de Man  
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**Contact Number:** 084 7571565

Prof. Catherine Ward  
**Email Address:** [Catherine.Ward@uct.ac.za](mailto:Catherine.Ward@uct.ac.za)  
**Contact Number:** 021 6503422

**Study Approval Reference:** *Ethics reference number*

### Declaration by participant

By signing below, I (*name*) ..... agree to take part in a research study entitled:

### Cape Town Emergency Medicine Doctor Youth Violence Prevention Study

I declare that:

- I have read or had read to me the participant information and consent form and it is written in a language with which I am fluent and comfortable with.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.

Signed at (*place*) ..... on (*date*) .....2015.

.....

Signature of participant

- I understand that this **group discussion** will be recorded for note-taking purposes.

Signed at (*place*) ..... on (*date*) .....2015.

.....

Signature of participant

**Declaration by investigator**

I (name) ..... declare that:

- I made explained the study information to .....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) ..... on (*date*) .....2015.

.....

Signature of investigator

# Part B:

## Structured literature review

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## A) Objectives of literature review

To review the current evidence base with regards to:

- the prevalence of youth violence worldwide and in SA
- current youth violence prevention related practices in Emergency Medicine (EM) worldwide and in South Africa
- prevention strategies already established worldwide and in SA
- studies of doctors' and nurses' attitudes towards youth violence preventions initiated from the Emergency Centre (EC) worldwide and in SA.

## B) Literature search strategy

The following databases were searched for research articles and results relevant to the topic: Pubmed including Medline, Africa-wide:NIPAD, CINAHL, Cochrane Library, PsychINFO, PsycTESTS, SCOPUS, Web Of Science, and SocIndex.

**Inclusion criteria:** All studies that were encountered that speak to the research question were evaluated, and in order to gain an in-depth knowledge of the subject matter, studies of all levels of evidence were entertained, but with still keeping the well accepted hierarchy of level of evidence in mind. A helpful part of the search strategy was to follow certain high relevancy articles' similar study searches. As there were many support organisations and credible Hospital Based Violence Intervention Programmes (HBVIP), each with their own website, these websites with link pages to other sources also formed part of the search strategy for the literature review.

**Exclusion criteria:** As the broader research topic of youth violence prevention has considerable overlap with allied topics, e.g., intimate partner violence, domestic violence, gang related violence, bullying, and others, a fine balance had to be found between exploring too much of these topics and taking focus away from the main research topic. As there is a paucity of evidence specifically in terms of health care professionals' attitudes towards youth violence

prevention, a looser and more open research strategy was adopted. For instance, solely community interventions that did not include an Emergency Centre (EC) or hospital component were also excluded.

## **C) Interpretation of literature**

### **a. Definition of Youth**

The United Nations<sup>1</sup> definition of ‘youth’ is young people between the ages of 15 and 24 years. The National Youth Policy of 2009-2014<sup>2</sup> defines youth as ranging from 14 to 35 years. This more inclusive definition was chosen in an attempt to right some of apartheid’s wrongs in allowing a broader plan for development and education for those who had lost their younger years to the anti-apartheid struggle. But, at the same time, it also recognises that around the ages of 12, gang involvement may already place these young people at risk of committing or being victims of violence<sup>3</sup>, which would be to some degree consistent with the epidemiological picture of violence, which shows high prevalence from the teens to the thirties<sup>4</sup>. The Red Cross War Memorial Children's Hospital in Cape Town<sup>5</sup> defines children as patients up to and including 12 years of age. For the purposes of this study the definition of ‘youth’ will refer to individuals between the ages of 12 to 35 years.

In 2011 the population of Cape Town had 18% of its population in the 15 – 24 year old age group. The median age of the city’s population was 28 years. Households with no monthly income increased in 2001 from 13% to 14% in 2011. The percentage of households in Cape Town in formal and informal housing has more or less remained the same, with 78 % of households in 2011 living in formal housing (similar to 2001’s 79%), and 14% in informal housing in informal settlements (15 % in 2001). However there has been a large growth in the number of households living in backyard informal dwellings, with 7% in 2011, a large increase from 2001’s 4.3% of households. These statistics show a large youth population in Cape Town, with a large portion still living in dire socio-economic circumstances. This has implications for service delivery needs and planning, and also for youth violence prevention strategies.

## **b. Youth Violence worldwide**

The 2002 WHO *World report on violence and health*<sup>6</sup> states that violence can be divided into three broad categories, namely self-directed violence, interpersonal violence, and collective violence. Furthermore, self-directed violence are subdivided into suicidal behaviour and self-abuse; interpersonal violence into family and intimate partner violence; and community violence either being by acquaintances or by strangers. Collective violence by larger groups of people can be divided into social, political and economic violence. The focus of this literature review is on interpersonal violence, and one of the most robust indicators of the prevalence is homicides.

Worldwide about 200 000 homicides occur within the 10–29 year age group each year, which accounts for 43% of the total number of homicides globally. Homicide is the fourth leading cause of death in this age group, with 83% of these homicides involving male victims<sup>7</sup>. Among the top ten causes of death in above age group worldwide, homicide is ranked fourth, after road traffic injuries, HIV/AIDS and self-harm<sup>8</sup>. Using data from the WHO 2004 Global Burden of Disease Study, Gore et al.<sup>9</sup> found that violence was the second most common cause of disability adjusted life years (DALYs) in young men aged 20-24 years and third most common cause for young men between 10-24 years. Patton et al.<sup>10</sup> found violence to be the second most common cause of death (9.2 %) in males aged 10-24 years. Youth violence is clearly a problem of global concern that needs our ongoing and undivided attention.

## **c. Youth violence in Cape Town, South Africa**

Rates of fatal violence in South Africa are five and eight times higher than the global average for females and males, respectively<sup>4</sup>. The Western Cape Government Integrated Provincial Violence Prevention Policy Framework (IPVP) of 2013<sup>11</sup> brings the following statistics to light:

9162 deaths were recorded in the Western Cape catchment area from January to December 2010. 60% of these deaths were due to non-natural causes, of which 41% of non-natural deaths were due to homicide.

- Homicide rates in the Western Cape are 15% higher than in other provinces.
- Interpersonal violence is the second leading cause of premature death in the province after HIV/AIDS, accounting for 42% of these deaths in 2008.
- For non-fatal injuries, interpersonal violence makes up more than half of all injuries presenting to state sector facilities across all levels of care.

According to the 2005 National Youth Victimization Survey<sup>12</sup>, a fifth of children in the Western Cape between the ages of 12 and 17 years had been exposed to domestic violence. Cape Town also is known to have a large gang and youth violence problem<sup>13</sup>. According to crimestatssa.com<sup>14</sup>, in 2015, Cape Town had 8 of the 10 worst police precincts in the country in terms of murder and attempted murder and 6 of the top 10 for drug-related crime. Furthermore, if one compares the City of Cape Town with the City of Tshwane, Cape Town has the larger youth violence problem of the two major South African cities<sup>13</sup>. In 2011, the highest percentage of deaths due to non-natural causes in Cape Town occurred in the age group 20-24 at 58.3%, closely followed by age group 15-19 at 57.6%. It is only in these two age groups where the percentage of non-natural causes of death was higher than that of natural causes<sup>13</sup>. These statistics illustrate the high burden of youth violence in this area. Moreover, the majority of households in South Africa do seek medical help from public health care facilities, with the Western Cape proportion being 52.5%<sup>15</sup>. Consequences of these high levels of violence are thus often first seen in the Emergency Centre. It is therefore worth considering whether an intervention, at this first contact with the health system, might prevent future violence (and hence prevent injury and death).

#### **d. Risk and Protective factors in Youth Violence**

**Risk and protective factors of youth violence** are defined as aspects of a person, group or environment that make youth violence more or less likely to occur, respectively<sup>16</sup>. Both risk and protective factors occur in relationship to the individual, family, peer relationships, the community, and wider society. In terms of **risk factors**, they are characteristics that increase the likelihood of a person becoming a victim or perpetrator of violence, or can also be risk factors of a physical place with high rates of youth violence. The more risk factors one has the higher the

likelihood that one will become involved in youth violence, or that violence will occur in that particular setting<sup>17</sup>. Risk factors most strongly associated with youth violence are involvement in crime and delinquency, antisocial peers and lack of social ties, parental involvement in antisocial behaviour and crime, alcohol and drugs use, male gender, poverty, and aggressive behaviour and history of involvement in violence<sup>16</sup>. See **addendum 1** for some studies that have shown that a fairly wide range of risk factors apply across settings<sup>18, 19</sup>. One such risk factor is male gender. However, there are also specific risk factors to a particular setting, e.g., high alcohol outlet density, which become important when a youth violence prevention programme is designed, as identifying area specific factors can lead to a more focussed and possibly more effective intervention<sup>20</sup>.

**Protective factors** can be divided into direct protective factors and buffering factors and have in recent times been more of a focus for researchers of youth violence. Direct protective factors predict a lower probability of violence. Buffering factors predict a low probability of violence in the presence of risk. The benefit of protective factors goes beyond the obvious, because even in children with a high risk for violence, more than 50% will not engage in serious youth violence in later years<sup>20</sup>. There is an inverse relationship to the amount of protective factors and violence and therefore the more protective factors within an individual's life or present in a geographical setting, the lower the likelihood of youth violence becomes<sup>20</sup>. The direct protective and buffering factors are amongst others above-average intelligence, low levels of impulsiveness, pro-social attitudes, close relationships with parents, medium socioeconomic status, strong ties to their school, and living in a non-deprived or non-violent neighbourhood<sup>20</sup>.

#### **e. Youth Violence Prevention**

Many authorities are in consensus that violence should be approached like a disease. Dr Gary Slutkin in his paper "Violence is a contagious disease"<sup>21</sup> discusses how violence meets the definitions of a disease and of being contagious (but not infectious), behaves like infectious diseases, and fits the basic infectious disease framework. Understanding the so-called pathogenesis of violence can lead to more effective future violence reduction strategies. In line

with this, the WHO already in 2002 started to take a public health approach to violence prevention as described by Krug et al.<sup>5</sup> The WHO Global Status Report on Violence Prevention 2014<sup>22</sup> highlights that a growing number of scientific studies have now demonstrated the preventability of violence. It, however, seems that prevention strategies are not all equal and that certain strategies are supported stronger by evidence, and that prevention gains are also greater for certain types of violence.

In terms of developing of a prevention programme, it is vital to have an in-depth knowledge of the causes, risk and protective factors of youth violence. Prevention efforts aim to completely eliminate or at least reduce risk factors that young people are exposed to, and enhance both buffering and protective factors. As President Nelson Mandela wrote in the WHO's 2002 World Report on Violence and Health, "Many who live with violence day in and day out assume that it is an intrinsic part of the human condition. But this is not so. Violence can be prevented. Governments, communities and individuals can make a difference."

Youth violence intervention programmes fall into 3 categories<sup>23</sup>:

- 1) **Primary prevention** population-level programmes that prevent even the problem from occurring,
- 2) **Secondary prevention** programmes that target youth at risk of a poor outcome e.g., abused children or those exposed to high levels of violence, and
- 3) **Tertiary prevention** interventions programmes for youth that already committed a violent offence.

The Pan American Health Organization (PAHO)<sup>24</sup> presents us with a multi-sectored model for developing a youth intervention and prevention interventions can then aim at these different levels:

- **Individual youths' behaviour programmes**

- **Interpersonal programmes** to change peers and family behaviour in the youths' immediate environment
- **Community programmes** to change for example the behaviour of schools and school staff
- **Policy programmes** to change policies and legislation within schools and further afield.

Programmes may address only one level, but multilevel approaches have the added benefit of strengthening programmes as the messages are consistently and continuously delivered throughout the youth's environments and are thus more likely to be adopted into practice<sup>24</sup>.

#### **f. Youth Violence prevention in South Africa**

Ward et al. in *Youth Violence: Sources and Solutions in South Africa*<sup>25</sup> identified potential interventions including youth violence prevention in the early years, school-based interventions, interventions for out-of-school contexts, intervening with youths in gangs (including prevention, disengagement and suppression programmes), diversion programmes for young offenders, and included specifically at youth violence in cities and neighbourhoods.

**The Violence Prevention through Urban Upgrading (VPUU)** project<sup>26</sup> is a City of Cape Town project aimed at reducing violent crime and improving social conditions across the Cape Flats. The VPUU aims to reduce crime, increase safety, upgrade neighbourhoods, improve social standards and introduce sustainable community projects. It is a local example of an urban upgrade strategy, and one of the major strategies proposed in the Western Cape Government's IPVP framework of 2011<sup>27</sup>. The IPVP aims to promote intersectoral cooperation for the key elements of successful violence prevention approaches. One of the direct results of the IPVP was to initiate a selected high-risk area project to reduce alcohol-related violence, which would draw on the methodology used by the VPUU.

The US based **Cure Violence** organization partnered from January 2013 with Hanover Park VPUU<sup>28</sup>. It emphasises intervention specialists or so-called "interrupters" to the violence prevention efforts linked to an EC as starting point. However community organisations recently criticised the project for being ineffective and not applicable to the South African context<sup>29</sup>. This

was refuted by the mayor's office, stating that a recent evaluation showed great effectiveness resulting in a 31% reduction in murders compared to the same period in preceding years.

#### **g. Youth Violence prevention in Hospitals**

The injury control literature shows that injury reduction can be attained through legislation, regulation and bio-engineering<sup>30, 31</sup>. Changing behaviour can however be much harder to attain. Still, the potential to prevent injury is reported for intimate partner violence, impaired driving and alcohol-related injuries<sup>32, 33, 34, 35</sup>. Williams et al.<sup>35</sup> determined that the so-called 'teachable moment' has a half-life of 48 hours. Patients were more open to counselling and much more likely to come back for follow-up appointments within this period. They were more ready to make a change because they perceived an association between their injury, the assault, and their drinking. Others have speculated that in some cases the violent act, the injury, or the treatment required may make the individual more amenable to change or may even act as an intervention in itself, leading to a change in behaviour. Even a screening process with detailed questions about drinking habits, may serve as a kind of intervention by raising awareness around the dangers of drinking<sup>36</sup>. Youth violence prevention programmes in the hospital can also be divided into primary, secondary and tertiary prevention interventions.

**Primary violence prevention programmes** are there to prevent violence before it happens. Relevant to the hospital setting is the Baltimore-based Hopkins Injury Prevention and Community Outreach Collaborative where youth visited a Level 1 trauma centre and were then exposed to a hospital tour with a video and slide presentation that graphically depicted the results of gun violence<sup>37</sup>. This programme resulted in short-term reductions in aggression, but unfortunately long-term impact was not studied. A different aspect to primary prevention is mentioned by Goodall et al.<sup>38</sup>, commenting that there are a few interventions counted as primary prevention that will take healthcare workers out of the clinical environment to deliver interventions in schools, youth clubs, or prisons with the aim of changing attitudes to violence.

At the time of an EC intervention it is most likely that the youth seen there would already have been exposed to violence and thus the **secondary and tertiary prevention strategies** would be most relevant. **Secondary prevention interventions** utilises the teachable moment phenomenon by discussing the perceived severity, susceptibility and preventability soon after the injury<sup>39</sup>.

A large percentage of violence injured youth are discharged home directly from the EC. One of the main challenges for EC-based interventions is the so-called 'dose' phenomenon. Violence prevention interventions are more likely to be effective if there are repeated contact sessions with the victim<sup>25</sup>. While youth victims of violence may present to the EC, there is no regularity to these presentations and thus repeat sessions are unlikely. Like with any intervention, it is important to question the effectiveness of EC based secondary prevention initiatives. If an EC-initiated youth violence prevention intervention was to be effective, other ways of increasing the dose of the intervention will have to be found.

In terms of violence related interventions used in the EC, there are several aggression and alcohol-related aggression screening tools, but very few short programmes designed specifically to reduce violence but still be practical enough in a busy, clinical environment<sup>40</sup>. There are even fewer with robustly tested outcomes. Addendum 2 presents a table of examples of randomised controlled trials (RCTs) of interventions for violence and associated behaviours in healthcare settings. A systematic review of secondary prevention initiatives in ECs found only four suitable programmes of which three were case management programmes (evaluations of two of which were RCTs), and another retrospective evaluation of the 'Caught in the Crossfire' programme<sup>41</sup>. All of these evaluations had small sample sizes, and were followed up for between 4 months to a year. As patients were only contacted for a baseline interview and enrolment in the weeks after the EC visit, and intervention often did not begin until weeks after the injury, the benefit of the teachable moment was probably lost in the process<sup>42</sup>. Four examples of violence prevention programmes working from ECs, namely Project Ujima, Caught in the Crossfire, SS-COVAID, and SafERteens are described briefly below.

A retrospective record review of more than two hundred injured patients in the 10–18 years age group was done on the case management service, **Project Ujima** in Milwaukee, Wisconsin<sup>43</sup>. Three years prior to the evaluations, a case management service was established in this EC. A social worker and a Project Ujima representative offered the programme services, which consisted of home visitation, mental health services and youth activities that followed after the initial EC visit. The in-hospital and community support components included counselling and case management, with referrals to outside services, such as youth development programmes, family development programmes, housing and school support, legal assistance and job preparation. Only 1% of the youth returned to the EC with a new violence related injury in the one year follow-up time.

**Caught in the Crossfire** is an Oakland, California based intervention programme aimed at youth admitted with injuries due to violence<sup>44</sup>. According to the programme, interventions must be at the right time and with the right person. “Intervention specialists” that are young adults from similar communities who have themselves experienced violence, are called in early to provide case management and mentorship with the patient and family for a period up to 1 year. They emphasise alternatives to retaliation, identify short- and long-term needs, and connect the patient with local resources to promote a nonviolent lifestyle. As with the other programmes, the resources include counselling, and even extend to job training, legal assistance and life skills training. Becker et al. used a retrospective case–control design to compare youth admitted to hospital who were enrolled in the programme versus from the previous year who had not received the programme, and who therefore could serve as a control group. Forty three cases from the treatment group were compared to 69 control patients that did not receive the interventions. Although none of the measured outcomes was statistically significant, there was a trend toward benefit for those enrolled in the programme. A more recent evaluation of Caught in the Crossfire showed a lower criminal justice involvement risk in treatment groups compared to a control group not enrolled in the programme<sup>45</sup>. Youth Alive! Caught in the Crossfire, Oakland, claims to be the

first of its kind in the US<sup>46</sup>, and led to the establishing of **the National Network of Hospital-based Violence Intervention Programs (NNHVIP)** (<http://nnhvip.org/>).

A structured multi-session cognitive behavioural programme that attempts to address both alcohol misuse and violence, deals specifically with the issue of alcohol-related aggression. Control of Violence for Angry Impulsive Drinkers (COVAID)<sup>47</sup> developed by McMurrin and co-workers, is a ten session cognitive behavioural programme that addresses both the emotions and behaviour associated with aggression and violence and some of the contextual factors such as the drinking environment and problem solving in the face of challenge was developed in the criminal justice setting. It formed the basis for the development of **SS-COVAID**, a single session intervention for use in healthcare. SS-COVAID produced a significant reduction in alcohol consumption over a year of follow up, similar to the reduction via an ABI, but had no effect on alcohol-related aggression scores<sup>48</sup>.

An EC-based programme using brief interventions that is frequently mentioned in the literature has been evaluated more extensively for effectiveness is the US-based **SafERteens initiative**. It is also of particular interest because it uses a combination of face-to-face contact with a therapist and a computer-based intervention to allow exploration of complex issues in a short time<sup>48</sup>.

SafERteens focused on teenage attendees to the EC, not all of whom were victims of violence. All patients completed computerised alcohol use and violence screening questions and were then randomised into 3 groups. The control group received a brochure only. The two intervention groups received a 35-minute brief intervention delivered by either a computer or a therapist in the EC. The study results suggest that technology can potentially aid in assisting in delivering important prevention messages to high-risk youth in a busy EC setting. The programme reduced peer victimisation and aggression at one year, but although changes in alcohol consequences were seen at 3 and 6 months post intervention, the effect was not sustained at one year follow-up<sup>49</sup>.

However, one must be realistic that there are different viewpoints on SafERteens' effectiveness.

The National Institute of Justice's crimesolutions.gov<sup>50</sup> suggests that although both studies report some positive outcomes, majority of evidence in these studies shows that the SafeERteens

programme had no effect in changing behaviour. CrimeSolutions.gov is a US government affiliated organisation that uses research to rate the effectiveness of criminal justice related outcome programmes as a support for practitioners and policy makers.

Many of the above interventions can be classified as a Hospital Based Violence Intervention Programmes (HBVIP). There are at least 20 across the United States and a few across Europe, which have been shown varied effectiveness in terms of cost-benefit, risk reduction, re-injury and retaliation and other parameters of youth violence prevention<sup>51</sup>, and that there is up to date no established HBVIP programme in South Africa.

#### **h. Doctors' attitudes to Youth Violence Prevention**

South Africa has no known HBVIP. But, as is shown above, there are many functioning HBVIPs in different hospitals in similar violence plagued city hospitals in North America and Europe that are making a strong connection between community and EC efforts in youth violence prevention. One can then ask the question: What would South African EM practitioners' attitudes towards youth violence prevention and more specifically HBVIP be, as this would be an important factor in eventually implementing HBVIPs in Cape Town. Attitudes are formed by many factors, including knowledge on the subject matter and capacity to deal with challenges that new subject matter brings to the table. Attitude formation can also be described through the three broad categories of cognition, affect and behaviour<sup>52</sup>.

Some work has been done in the cognitive category in the form of core competencies professionals will require for an effective youth violence prevention practice. The most relevant paper written on this is by Denninghof et al. "Emergency Medicine: Competencies for Youth Violence Prevention and Control"<sup>53</sup>. The premise is adopted that health care professionals providing treatment for youth violence will have many opportunities for intervention if they are educated well enough in youth violence specifics and have established protocols for action or

appropriate referral. Generalist, specialist and scholar levels of competence were identified, with emergency medicine providers falling into the specialist or above levels.

In relation to doctor's attitudes toward brief interventions in the EC, much can be learned from non-communicable disease prevention like smoking and alcohol cessation interventions, and there is some overlap of effect and method with youth violence prevention brief interventions. Very few studies were found strictly relating to emergency doctors' attitude towards youth violence prevention activities or interventions within the EC. Therefore, the four studies discussed next are of a more varied emergency centre brief intervention and not specifically confined to youth violence prevention nature. These four studies span two different populations in two different countries. Graham et al.<sup>54</sup> did a mail survey with 569 Michigan EM physicians on their willingness to support BI's delivered in the EC with alcohol abuse or dependence. Cummings et al.<sup>55</sup>, also in 2000, did a survey to measure the attitudes of EC personnel regarding their role in injury prevention education in children and parents at a tertiary care trauma centre. A study was done with 60 nurses at an urban public hospital "Adolescent violence. Assessment of nurses' attitudes and educational needs"<sup>56</sup>. In 2014, Riese et al.<sup>57</sup> compared EM, paediatric, and surgery registrars' behaviour, attitudes and perceived barriers to youth violence prevention in the acute care setting. Three of these studies showed a lack of confidence of staff to engage with patients in terms of violence prevention. All suggested a need for further training in violence prevention, particularly in the areas of available resources and intervention for adolescent victims of violence, and three studies agreed that lack of time was one of the greatest barriers to intervening through the EC. In the study that spoke specifically to whether youth violence prevention falls within the role of the emergency physician, less than half agreed that they should actually play a role in prevention!

#### **D) Further Research areas**

**Risk and Protective factors in youth violence:** Some risk and protective factors are globally relevant<sup>18, 19</sup>, and some are specific factors to an area that will be more locally relevant, and can be the key to breakthroughs in youth violence prevention. Further research is needed to identify such risk and protective factors for South Africa, and more specifically Cape Town.

#### **Youth violence prevention in Cape Town, South Africa and in South African ECs:**

From the above literature it can be appreciated that a great deal of research has already been done on certain aspects of youth violence prevention interventions. Where there are still gaps in knowledge is specifically in terms of the South African context, and even more specific the Cape Town context of youth violence prevention in the EC. The Cape Times article referenced earlier, asked the question: Why does it seem that gang violence is under control in other cities in South Africa, but not in Cape Town? Another question is also asked of the external validity of the US developed intervention now used on the Cape Flats. As Cape Town is the city in South Africa reportedly with the highest youth and gang violence problems, translational research is lacking and urgently needed in the form of piloting strong interventions that are already successfully used in other countries. If this can be combined with (from the outset) good design and monitoring and evaluation, it can lead to piloting of evidence based interventions for Cape Town.

**Doctors' attitudes in Youth Violence Prevention:** No research could be found on specifically South African doctors' or nurses' attitudes towards any form of prevention strategies initiated from the EC. It would be important to do further research and even in different areas of South Africa, as the successful implementation of such an EC initiated programme relies heavily on the doctor or nurse as champion.

**Knowledge and training for youth violence prevention:** Another gap in the literature review is in terms of how much undergraduate and post-graduate teaching on youth violence prevention is included in medical school curriculums. This can be evaluated in the framework of core competencies, and will be able to give direction towards changes in the various curriculums to reflect the knowledge needed for best practice, when one evaluates a lack of knowledge as a possible determinant of attitude.

## E) References

- 1) UNESCO. Learning to live together. What do we mean by “youth”? [Internet] [Last accessed 2016 April 28]. Available from: <http://www.unesco.org/new/en/social-and-human-sciences/themes/youth/youth-definition/>
- 2) South Africa. The Presidency. National Youth Policy 2009 – 2014; March 2009; p9 [Internet] [Last accessed 2016 April 28]. Available from: <http://www.thepresidency.gov.za/MediaLib/Downloads/Home/Publications/YouthPublications/NationalYouthPolicyPDF/NYP.pdf>
- 3) Ward CL, Bakhuis K. Indigenous theories of children’s involvement in gangs: Cape Town’s young people speak out. *Children & Society*. 2009; 24: 50–62
- 4) Norman R, Matzopoulos R, Groenewald P, Bradshaw D. The high burden of injuries in South Africa. *WHO Bulletin* 2007; 85(9): 695–701
- 5) Red Cross War Memorial Children’s Hospital Outpatient Clinic Information 2005 [Internet] [Last accessed 2016 April 28]. Available from: [http://www.westerncape.gov.za/Text/2005/7/red\\_cross\\_outpatient\\_clinic\\_bro.pdf](http://www.westerncape.gov.za/Text/2005/7/red_cross_outpatient_clinic_bro.pdf)
- 6) Krug E, Dahlberg L, Mercy J, Zwi A, Lozano R. World report on violence and health. Geneva: World Health Organization; 2002
- 7) Youth violence Fact sheet N°356 reviewed October 2015 [Internet] [Last accessed 2016 April 28]. Available from: <http://www.who.int/mediacentre/factsheets/fs356/en/>
- 8) Global health estimates: deaths by cause, age, sex and country, 2000–2012. Geneva; World Health Organization, Global health observatory data: violence prevention, homicide estimates 2012 [Internet] [Last accessed 2016 April 28]. Available from: (<http://www.who.int/gho/violence/en/>).
- 9) Gore, F. M., Bloem, P. J., and Patton, G. C. et al (2011). Global burden of disease in young people aged 10-24 years: a systematic analysis.. *Lancet*, 377, 2093-102.
- 10) Patton, G. C., Coffey, C., and Sawyer, S. M. et al. (2009) Global patterns of mortality in young people: a systematic analysis of population health data. *Lancet*, 374, 881-92
- 11) Western Cape Government integrated provincial violence prevention policy framework August 2013 final draft [Internet] [Last accessed 2016 April 28]. Available from: <https://www.westerncape.gov.za/text/2013/September/violence-prevention-cabinet-policy-final.pdf>

- 12) Leoschut, L, Burton, P. How Rich the Rewards? Results of the 2005 National Youth Victimization Study Monograph Series, No 1, Cape Town; May 2006 [Internet] [Last accessed 2016 April 28]. Available from: [https://www.issafrica.org/crimehub/uploads/National\\_Youth\\_Victimisation\\_Survey.pdf](https://www.issafrica.org/crimehub/uploads/National_Youth_Victimisation_Survey.pdf)
- 13) South Africa. Pretoria. Statistics South Africa. Comparison of the demographic profiles of two cities: Cape Town and Tshwane; 1997–2011 Report-03-09-082011, 2014, p11. [Internet] [Last accessed 2016 April 28]. Available from: <http://beta2.statssa.gov.za/publications/Report-03-09-08/Report-03-09-082011.pdf>
- 14) Crime Stats SA. Worst Ten Precincts: Largest number of reported crimes. [Internet] [Last accessed 2016 April 28]. Available from: <http://www.crimestatssa.com/topten.php>
- 15) South Africa. Pretoria. Statistics South Africa. Use of health care facilities and levels of selected health conditions in South Africa: Findings from the General Household Survey; 2011 Report No. 03-00-05, 2013, p9,30. [Internet] [Last accessed 2016 April 28]. Available from: <http://www.statssa.gov.za/publications/Report-03-00-05/Report-03-00-052011.pdf>
- 16) WHO Library Cataloguing-in-Publication Data: Preventing youth violence: an overview of the evidence. World Health Organization. ISBN 978 92 4 150925 1 (NLM classification: HV 6625) [Last accessed 2016 April 28]. Available from: [http://apps.who.int/iris/bitstream/10665/181008/1/9789241509251\\_eng.pdf?ua=1&ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/181008/1/9789241509251_eng.pdf?ua=1&ua=1&ua=1)
- 17) Loeber R, Farrington DP, Stouthamer-Loeber M, White HR. Violence and serious theft: Development and prediction from childhood to adulthood. London: Taylor & Francis; 2008
- 18) Brook DW, Brook JS, Rosen Z, De la Rosa M, Montoya ID, Whiteman M. Early risk factors for violence in Colombian adolescents. The American Journal of Psychology. 2003;160(8):1470-1478
- 19) Souverein FA, Ward CL, Visser I, Burton P. Serious, violent young offenders in South Africa -are they life-course persistent offenders? Journal of Interpersonal Violence. 23 February 2015:0886260515570748
- 20) Lösel F, Farrington DP. Direct protective and buffering protective factors in the development of youth violence. American Journal of Preventive Medicine. 2012;43(2):S8–S23
- 21) CONTAGION OF VIOLENCE Workshop Summary (2013) Deepali M. Patel, Melissa A. Simon, and Rachel M. Taylor, *Rapporteurs* Forum on Global Violence Prevention Board on Global Health International Standard Book Number-13: 978-0-309-26364-1 International

Standard Book Number-10: 0-309-26364-6 [Internet] [Last accessed 2016 April 28].  
Available from: <http://cureviolence.org/wp-content/uploads/2014/01/iom.pdf>

- 22) WHO Library Cataloguing-in-Publication Data, Global status report on violence prevention 2014. World Health Organization. ISBN 978 92 4 156479 3 (NLM classification: HV 6625) [Internet] [Last accessed 2016 April 28]. Available from: [http://www.who.int/violence\\_injury\\_prevention/violence/status\\_report/2014/en/](http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/)
- 23) Farrell AD, Flannery, DJ. Youth violence prevention: Are we there yet? *Aggression and Violent Behavior*. 2006; 1: 138–150
- 24) Breinbauer C, Maddaleno M. *Youth: Choices and Change*. Washington, DC: Pan American Health Organization. 2005
- 25) Ward CL, Van der Merwe A, Dawes A. *Youth Violence: Sources and Solutions in South Africa*. UCT Press 2012 page 392
- 26) Violence Prevention through Urban Upgrading Project 2014 [Last accessed 2016 April 28]. Available from: <https://www.capetown.gov.za/en/MetroPolice2/Pages/Violence-prevention.aspx>
- 27) Western Cape Government Integrated provincial violence prevention policy framework August 2013 page 15. [Last accessed 2016 April 28]. Available from: <https://www.westerncape.gov.za/sites/www.westerncape.gov.za/files/integrated-violence-prevention-policy-framework.pdf>
- 28) Cure Violence Other international Regions [Last accessed 2016 April 28]. Available from: <http://cureviolence.org/partners/international-partners/other-international/> and <http://cureviolence.org/wp-content/uploads/2015/10/dissertation.pdf>
- 29) Carlo Petersen. Gang project under fire: Community Organisations slam City's Operation Ceasefire as Ineffective. Newspaper article. Print version. Cape Times. 24 Dec 2015 p1
- 30) Baker SP. Childhood injuries: the community approach to prevention. *J Public Health Policy* 1981;2:235-46.
- 31) Karlson T. Injury control and public policy: a review. *Crit Rev Environ Control*. 1992;22:195-241.
- 32) Mello MJ, Nirenberg TD, Longabaugh R, et al. Emergency department brief motivational interventions for alcohol with motor vehicle crash patients. *Ann Emerg Med* 2005;45:620-5.
- 33) Morrison LJ, Allan R, Grunfeld A. Improving the emergency department detection rate of domestic violence using direct questioning. *J Emerg Med* 2000;19:117-24.

- 34) Rhodes KV, Gordon JA, Lowe RA.; Society for Academic Emergency Medicine Public Health and Education Task Force Preventive Services Work Group. Preventive care in the emergency department, Part I: Clinical preventive services — Are they relevant to emergency medicine? Acad Emerg Med 2000; 7: 1036-41.
- 35) Williams, S., Brown, A., Patton, R., Crawford, M. J., AND Touquet, R. The half-life of the 'teachable moment' for alcohol misusing patients in the emergency department. *Drug Alcohol Dependence*, 2005; 77, 205-8.
- 36) McCambridge, J., and Day, M. Randomized controlled trial of the effects of completing the Alcohol Use Disorders Identification Test questionnaire on self-reported hazardous drinking. *Addiction*. 2008; 103, 241-8.
- 37) Chang DC, Cornwell EE III, Sutton ERH, et al. A multidisciplinary youth violence-prevention initiative: impact on attitudes. *J Am Coll Surg* 2005; 201:721-3.
- 38) Goodall, C. A., Devlin, M. F., and Koppel, D. A. Medics against violence--the development of a new violence prevention intervention for schools. *Dent Update*, 2010; 37, 532-4.
- 39) Johnson SB, Bradshaw C, Wright J, et al. Characterizing the teachable moment: is an emergency department visit a teachable moment for intervention among assault-injured youth and their parents? *Pediatr Emerg Care* 2007; 23:553-9
- 40) Oxford Textbook of Violence Prevention, Epidemiology, Evidence, and Policy Edited by Peter D. Donnelly and Catherine L. Ward. Oxford Textbooks In Public Health 978-0-19-967872-3 | Hardback | 27 November 2014
- 41) Snider, C. E., and Lee, J. Youth violence secondary prevention initiatives in emergency departments: a systematic review. *Canadian Journal of Emergency Medicine*. 2009; 11, 161-8.
- 42) Cheng TL, Wright JL, Markakis D, et al. Randomized trial of a case management program for assault-injured youth: impact on service utilization and risk for reinjury. *Pediatr Emerg Care* 2008; 24:130-6.
- 43) Marcelle DR, Melzer-Lange MD. Project UJIMA: working together to make things right. *WMJ* 2001; 100:22-5.
- 44) Becker MG, Hall JS, Ursic CM, et al. Caught in the Crossfire: the effects of a peer-based intervention program for violently injured youth. *J Adolesc Health* 2004; 34:177-83.
- 45) Shibru D, Zahnd E, Becker M, et al. Benefits of a hospital-based peer intervention program for violently injured youth. *J Am Coll Surg* 2007; 205:684-9.

- 46) Youth Alive! Intervention [Internet] [Last accessed 2016 April 28]. Available from:  
<http://www.youthalive.org/caught-in-the-crossfire/>
- 47) COVAID: Control of Violence for Angry Impulsive Drinkers. [Internet] [Last accessed 2016 April 28]. Available from: <http://delight.co.uk/documents/COVAID2.pdf>
- 48) Goodall, C. A., Bowman, A., and Smith, I. et al. A randomized trial of brief intervention strategies in patients with alcohol-related facial trauma as a result of interpersonal violence. *Addiction Science and Clinical Practice*. 2012; 7, A66-A66
- 49) Cunningham RM, Chermack ST, Zimmerman MA, Shope JT, Bingham CR, Blow FC, Walton MA. Brief motivational interviewing intervention for peer violence and alcohol use in teens: one-year follow-up. *Pediatrics*. 2012; 129(6): 1083-90
- 50) Crime Solutions.gov Program Profile SafERteens Evidence Rating [Internet] [Last accessed 2016 April 28]. Available from:  
<http://www.crimesolutions.gov/ProgramDetails.aspx?ID=163>
- 51) The National Network of Hospital-based Violence Intervention Programs (NNHVIP) home page. [Internet] [cited 2015 June 23]. Available from: <http://nnhvip.org/mission/#>
- 52) Hogg, MA, Cooper, JM, editors. *The Sage handbook of social psychology (concise student Ed.)*. Los Angeles, CA: Sage 2007; 123-145
- 53) Denninghoff KR, Knox L, Cunningham RM, Partain S. Emergency Medicine: Competencies for Youth Violence Prevention and Control. *Acad. Emerg. Med.* September 2002, 9:947–956.
- 54) Graham DM, Maio RF, Blow FC, Hill EM. Emergency physician attitudes concerning intervention for alcohol abuse/dependence delivered in the emergency department: a brief report. *J Addict Dis.* 2000;19(1):45-53
- 55) Cummings GE, Voaklander D, Vincenten J, Policicchio C, Borden K. Emergency staff survey on their role in pediatric injury prevention education-a pilot study. *J Emerg Med.* 2000 Apr; 18(3):299-303.
- 56) Breakey S, Wolf KA, Nicholas PK. Adolescent violence. Assessment of nurses' attitudes and educational needs. *J Holist Nurs.* 2001 Jun; 19(2):143-62.
- 57) Riese A, Turcotte Benedict F, Clark MA. A survey of resident attitudes and behaviors regarding youth violence prevention in the acute care setting. *J Trauma Acute Care Surg.* 2014 Sep; 77 (3 Suppl 1):S29-35.

**Addenda to the Literature Review**

**Addendum 1** (copied from “Preventing youth violence: an overview of the evidence. WHO.” Available from [http://apps.who.int/iris/bitstream/10665/181008/1/9789241509251\\_eng.pdf?ua=1&ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/181008/1/9789241509251_eng.pdf?ua=1&ua=1&ua=1))

**Risk factors for youth violence by developmental stage and ecological level**

ECOLOGICAL LEVEL	DEVELOPMENTAL STAGE					
	CONCEPTION AND EARLY INFANCY 0-1 YEAR	INFANCY 1-3 YEARS	CHILDHOOD 4-11 YEARS	EARLY ADOLESCENCE 12-14 YEARS	LATE ADOLESCENCE 15-18 YEARS	EARLY ADULTHOOD 18-29 YEARS
<b>Individual risk factors</b>	Attention deficit, hyperactivity, conduct disorder or other behavioural disorders					
	Male sex					
	Genetic factors					
	Low intelligence					
				Involvement in crime and delinquency		
		Low academic achievement				
	Parental drug use			Illicit drug use		
	Harmful use of alcohol					
	Child maltreatment					
					Unemployment	
<b>Family and close relationship risk factors</b>	Poor parental supervision					
	Harsh and inconsistent discipline by parents					
	Divorce of parents					
	Teenage pregnancy					
	Parental depression					
	Family history of antisocial behaviour					
	Unemployment in the family					
	Harmful alcohol use during pregnancy					
				Delinquent peers		
				Gang membership		
		Bullying perpetration and victimization				
<b>Community and society level risk factors</b>	Access to alcohol					
	Illicit drug markets					
		Harmful use of drugs				
	Access to firearms					
	Poverty					
	Inequality					

## Addendum 2

### Examples of randomised controlled trials of interventions for violence and associated behaviours in healthcare settings

Intervention	Type of violence	Details of trial and outcomes	Country	Reference
IRIS (Identification and Referral to Improve Safety)	Domestic abuse	A cluster RCT of training to identify and refer female victims of domestic abuse in primary care. (n=48 GP practices)	U.K.	Feder et al. 2011
Weave	Domestic abuse	A cluster RCT to test an intervention for domestic abuse in primary care. (n=52 doctors and n=272 patients)	Australia	Hegarty et al. 2013
Alcohol Brief Intervention	Alcohol related violence and trauma	RCT compared a nurse-delivered alcohol brief intervention to a leaflet in maxillofacial clinics (n=151)	U.K.	Smith et al. 2003
Alcohol Brief Intervention	Alcohol related violence and trauma	RCT compared a nurse-delivered alcohol brief intervention to a leaflet in maxillofacial clinics (n=195)	U.K.	Goodall et al. 2008
SS-COVAID	Interpersonal violence/alcohol	RCT compared an alcohol brief intervention to a brief intervention designed to address both alcohol and violence (SS-COVAID) (n=187)	U.K.	Goodall et al. 2011
SafERteens	Youth violence	A three arm RCT of brief interventions to address violence and alcohol for patients aged 14-18 years delivered in the emergency department. This programme has a full year of follow up (n=726 individuals).	U.S.	<a href="#">Cunningham et al. 2012</a> Walton et al. 2010
Bridging the Gap	Youth violence	This RCT compared a hospital delivered brief violence intervention alone with a brief violence intervention plus community case management. (n=75)	U.S.	Abutanos et al. 2011

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**Chapter 23 Preventing Violence through Interventions in the Health System**

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# **Part C:**

## **Study results**

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## Emergency Medicine Registrars' Attitudes towards Youth Violence Prevention Interventions in Cape Town Emergency Centres

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### Abstract

**Background:** The City of Cape Town, South Africa, has a large youth violence problem with the highest percentage of non-natural deaths per age group in Cape Town occurring between 15 and 24 years of age. Many authorities suggest that youth violence is preventable and there is a fast growing international knowledge base on how emergency centres (ECs) and EC personnel can contribute to youth violence prevention (YVP). In order to utilise this opportunity most effectively, it is important to understand the challenges faced by EC staff, their perceptions of youth violence, and their willingness to engage in YVP interventions in the EC. There is currently no known EC-based YVP intervention in South Africa.

**Objectives:** This study explored the perceptions and attitudes of Cape Town emergency medicine doctors on youth violence, their role in YVP and how it applies to their practice in the EC.

**Methods:** Semi-structured focus groups, each with 3-5 Cape Town emergency medicine (EM) registrars, were conducted, using five basis questions for discussion to elicit participants' perceptions of and attitudes towards YVP. Data saturation was reached after three focus groups. Thematic analysis as described by Braun and Clarke was carried out on the focus group data sets.

**Results:** The three focus groups were all diverse in terms of race, gender, and level of training. In terms of the "Extent of the problem" themes around acceptability and increased burden were explored. "Youth Violence Prevention in the EC" focused on the

need for a champion, role of the emergency doctor vs. other stakeholders and sustainability issues.

**Conclusions:** EM registrars in Cape Town have a very limited knowledge of YVP in general and specific to the EC. They are faced with immense challenges that relate to patient load, violence directed to EC personnel, and a sense of despair or despondence in terms of ability to effect change. Concerns about the possible implementation of YVP interventions were sustained funding and sustainability in general. These and other factors influenced attitudes towards EC initiated YVP. Notwithstanding challenges, this study has shown an overwhelmingly positive attitude of EM registrars towards the concept of YVP intervention in the EC, and them being the champion or co-champion of it.

**Recommendations:** It is recommended that EM registrars in their training time should receive theoretical and practical training on YVP which can lead to increased awareness of YVP issue, the need to know resources in the community, and in the future will make it easier to implement a pilot intervention project in a selected EC. Further research is needed on a relevant screening tool to identify high risk patients in local ECs.

## BACKGROUND

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The City of Cape Town, South Africa, has a large youth violence problem with the highest percentage of non-natural deaths occurring between 15 and 24 years of age<sup>1</sup>. The Western Cape Government Integrated Provincial Violence Prevention Policy Framework (IPVP)<sup>2</sup> states that in the year 2000 violence accounted for almost 13% of premature mortality and was responsible for the second highest cause of years of life lost (YLLs), only superseded by HIV/AIDS (14.1%). Homicide mortality rates in the Western Cape are 15% higher than in other provinces. Injury is the second leading contributor to the burden of disease (BoD) in the Western Cape, contributing nearly 20% to the overall BoD and claiming approximately 600 lives each month. Those who

work in Emergency Centres (ECs) experience the destructiveness of youth violence on a daily basis.

Many authorities suggest that youth violence is preventable and there is a fast growing international knowledge base on how ECs and EC personnel can contribute to youth violence prevention (YVP). There is also a growing national momentum in the field of YVP interventions as seen for example in the focus of the IPVP<sup>2</sup>. Emergency physicians and emergency medicine (EM) registrars are pinnacle providers of curative care for youth violence victims in Cape Town. EM registrars are thus ideally positioned to make a difference to youth violence in their practice. In order to utilise this opportunity most effectively it is important to understand the challenges faced by EC staff, their perceptions of youth violence, and their willingness to engage in YVP interventions in the EC. This study explores the perceptions and attitudes of Cape Town emergency medicine doctors on youth violence, their role in YVP and how it applies to their work in the EC.

## METHODS

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### *Study design*

Three semi-structured focus groups, each with 3-5 EM registrars, were conducted to elicit their perceptions of and attitudes towards YVP. The interview guide was structured so that five questions progressed from general to specific in terms of YVP in the EC, with sub-questions as prompts if needed (Table 1). The questions aimed to be inclusive in exploring all of the broad categories of attitude formation including cognition, affect and behaviour<sup>3</sup>. The number of focus groups were determined by when data saturation in terms of the qualitative research method was reached.

### Table 1: Abbreviated focus group questions

As the study reports data involving human participants, the University of Cape Town Human Research Ethics Committee (HREC) gave full study approval (UCT HREC Ref: 464/2015).

### ***Study setting, population and sampling***

Current emergency medicine registrars, involved in the combined Universities of Cape Town and Stellenbosch Emergency Medicine MMed programme, were randomly selected from the Emergency Medicine registrar contact list of the Division of Emergency Medicine. They were then contacted via email and attendance confirmed via a telephone call closer to the focus group time. Participation was on a voluntary basis, with informed written consent (including for recording the discussions) (see addendum) provided by each participant. The total participants of 12 registrars constitutes a sample of 31% of EM registrars in Cape Town (n=39 possible participants at the time of study). Participation in focus groups was in the participants' personal capacity and not as representatives of their respective hospitals.

Exclusion criteria: EM consultant physicians, foreign medical students, interns and medical officers were not asked to participate in the study. Because of possible power dynamics within the focus group discussions, and thus inhibiting responses from lower ranked emergency registrars it was felt to exclude emergency physicians from this study and that their perceptions could be studied at a later stage.

### ***Procedure***

There were two facilitators at all the focus groups. The lead facilitator facilitated the focus group discussion, and an independent trained research assistant partnered to do verbatim transcription, audio recording and overall timekeeping for the focus group. The focus group started with each participant or respondent introducing themselves including which year of the registrar programme they were. Participants answered freely after each main question was stated by the main facilitator. The lead facilitator would only ask further exploratory questions if the discussion was too short, before eventually moving on to the next of the five questions.

### ***Data management***

Digital audio recordings were transcribed verbatim by the research assistant, and on initial transcribing, data was anonymised by assigning each participant a number. The original recordings are the only source of initial participants' names. Access to data is password protected and only two persons have access to this data set. Audio recordings and transcribed versions of

audio recordings without personal identifiers in electronic format will be kept for five years after publishing of the study by the main facilitator only.

### ***Data Analysis***

Thematic analysis as described by Braun and Clarke<sup>4</sup> was carried out on the focus group data sets. First, the transcribed focus group data sets were checked for technical and verbatim accuracy and corrections made by the lead facilitator. The transcribed focus groups were then hand-coded by the lead facilitator, and these Word documents were then printed out, and cut up into single theme strips by both facilitators. The single theme strips were sorted by hand into matching theme piles. Theme piles were sometimes consolidated with other theme piles and sometimes broken up into separate themes. These theme piles were analysed separately and then a summary was written on each theme. Conclusions were made on the basis of this summary document. Triangulation was accomplished through having two team members discuss each code, and reach consensus on the coding of each element of the data.

## **RESULTS**

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The three focus groups were all diverse in terms of race, gender, level of training. Non-South African (African) registrars also participated and brought different experiences to the discussion, but still with relevant local work experience. Data saturation was achieved by three focus group discussions and was evident with themes correlating between these focus groups. Section D: Supportive Documents includes a meaningful summary of the main themes with selected quotes from the focus group discussion.

Two main themes, “Extent of the Problem” and “Youth Violence Prevention in the EC”, with their subthemes (Fig 1 and Table 2) were identified and explored in relation to attitudes of the doctors towards youth violence in general and specific to the EC.

Figure 1: Graphic representation of main and subtheme analysis

Table 2: Main and sub-themes of study

## 1. EXTENT OF THE PROBLEM

- o The following **factors that influence youth violence** were identified: Majority were **male patients**, between **15 to 40 years age distribution**. There was also a concern that there is an increase in female perpetrators of violence. **Timing of violence** and **location** of the EC influenced intentional vs. non-intentional injuries prevalence, with certain areas in Cape Town having a high prevalence of risk factors for youth violence. **Interpersonal or domestic violence, gang violence** that even extended into the ECs, and **drug abuse** with a clear relation to alcohol use, played a major role in youth violence. **Law enforcement** and policing were identified as negative contributors illustrating the extent and severity of the youth violence problem. The discussion of these factors was not a mere process of naming of factors associated with youth violence, but rather spoke of a clear understanding of demographics and contributing factors, and of the extent of the intentional youth violence problem in Cape Town ECs. The study participants' experiences correlate well with statistics on violence and disease profiles seen in Cape Town ECs<sup>5,6,7</sup>. Shock was expressed by some respondents about how many intentional injuries happened in the paediatric age group, and also how many children are hurt as innocent bystanders (especially through gunshot wounds). This revealed a deep emotional, rather than only cognitive level<sup>3</sup> of engagement with the problem. On the same level participants were also willing to show empathy for socio-economic factors leading to youth violence. Frustration at failure of systems, especially law enforcement and social welfare, to effect change related to an attitude of despondence.
  
- o **Perceptions of the relevance and significance of the problem** and thus the validity of the subject matter, a **perception of an increasing violence problem**, and of **violence being unacceptable**, were identified as subthemes relating to the extent and severity of the youth violence problem. Participants agreed on the enormity of the youth violence problem in Cape Town, and there were contributions that established a common feeling that the problem was also increasing. Respondents talked about a ripple effect in communities and other aspects of society, for example the added burden to the health care system contributing to EC

overcrowding, with resources diverted away from other patients, and with the added workload on EC personnel. Lively discussions showed a willingness to engage with the problem. Respondents were at times very animated, with comments of disgust and disbelief in how intentional violence has been normalised. Doctors' lives being threatened at gunpoint by gang members, and disgust expressed with specifically violence toward children and the elderly, illustrated the above perceptions.

- o **An attitude of despondence** was separated as a stand-alone subtheme, and relates directly to the main theme of the extent of the problem. Many responses grappled with feelings and attitudes of despondence. Factors that contributed to despondence were an overwhelmed system, feelings of isolation and fear for doctors' own safety, inability of police to effect change, time restraints leading to compromised patient care, and lack of longer term support for victims of violence. An understanding of how the large socio-economic divide in South Africa contributed and propagated violence<sup>8,9</sup> and not seeing the social changes that respondents were hoping for, led to feelings of hopelessness. A study population specific factor contributing to an attitude of despondence was identified: every 3-6 months EM registrars rotate to a new EC or unit, which meant they were unaware of specific community resources to which to refer, and not being able to bring about change in such a short time. The perception of how unacceptable youth violence is, mentioned earlier, and positive attitudes towards YVP, discussed later, were at times trumped by the feelings of hopelessness that was expressed early on in all three focus groups.
- o **Ambivalence in terms of Optimism vs Realism:** When discussing YVP, respondents regularly would in the same breath be very optimistic and realistic, even pessimistic about what could be achieved taking current challenges into consideration. This subtheme relates to an attitude of despondence, but also relates to positive attitudes towards YVP in general, where, amidst overwhelming challenges, practical solutions for the problem would be sought.
- o **Youth Violence in general: Preventable vs. non-preventable.** Respondents sometimes debated whether youth violence was even fully preventable. This could show towards a lack

of knowledge as it does not correlate with literature<sup>10</sup> that maintains that youth violence is preventable. Some respondents felt that maybe it was preventable to some extent, but that it would be extremely difficult if not impossible to eradicate, which could more relate to either negativity or to despondence because of an overwhelming problem. Gang involvement was mentioned in this context as a complicating factor as good social changes would make it easier for YVP to succeed, but is not allowed by disruptive gang violence in an area<sup>11</sup>.

- o **Attitudes towards YVP in general were very positive.** It was also seen in the form of general solutions offered for Youth Violence like school intervention programmes, health education initiatives, environmental interventions, and using community role models for interventions. These all correspond well to interventions recognised to have a measure of success in YVP in general<sup>12, 13, 14</sup>, and relates to a good knowledge base, although maybe not intentional, wanting to seek for solutions speak of a positive attitude towards YVP. A few respondents emphasised that one would have to have a broader approach to youth violence to be able to come to an effective solution, which resonates with a multifaceted approach being more effective<sup>15</sup>. All the discussions on possible general solutions for youth violence and also delving into possible reasons for youth violence speak of an attitude of engaging with the problem and a generally positive attitude towards YVP, far outweighing the occasional negative comment or nuance.

## 2. YOUTH VIOLENCE PREVENTION IN THE EC

- **Sustainability concerns and challenges in the EC that would hamper YVP interventions** were raised. Intoxicated and aggressive patients being abusive towards staff, negating a possible teachable moment<sup>16, 17</sup>, limited staff including doctors, social workers, counsellors and psychologists, high patient load and severity of injuries were major contributors mentioned to not discussing prevention at the time of first consult. Accessibility of a referral service with proper and sufficient follow-up, and sustained funding, were felt to be major concerns and also determinants for possible sustainability. Potential additional pressure that prevention activities would put on existing social workers was a major concern. A different

perspective was that it was more an issue of committing to the task and allocating staff at certain points in time, with good utilisation of existing staff during daytime. The importance of integration into the existing services provided by the EC, with culturally appropriate interventions for foreigners, and consideration of patients' level of education was important if such a programme would be successfully implemented in Cape Town. These were very real and legitimate concerns that were raised and speak more of a realism and engagement with the problem than a despondence or negativity towards youth violence prevention in the EC.

- **Attitudes towards the EC's role in YVP. Positive attitudes** towards the EC's role were reflected in the many EC specific and EC located solutions that were mentioned by respondents. Returning patients were seen as a (missed) opportunity for re-injury prevention, the EC was seen as the right place to initiate a YVP intervention, as the EC is where these patients would go to and even be discharged from. Handing out prevention information, develop a referral system to the community social worker, and identifying community members that were interested in youth violence prevention, were all plausible intervention components forming part of current hospital based youth violence intervention practice<sup>18</sup>. **Negative attitudes** towards the EC's role in YVP were in the vast minority. The same respondents later in the focus group discussion would conditionally relent to a youth violence prevention contribution in the EC being doable with the right plan in place. One respondent maintained that an EM physician's role in YVP is really limited. Another respondent agreed partially because of time constraints. In terms of using time that is spent with for example suturing the wounds, respondents were quite negative, but maybe realistic, as the time would be very short, most patients would be intoxicated, and it would probably also be middle of the night. Some respondents thought that small things EM physicians could do would probably have little to no effect. Other examples of a negative attitude towards the EC's role clearly relate to the overwhelmed nature of EM doctors and challenges already mentioned.
- **Different Role Players and the idea of a 'champion' for a hospital based YVP initiative** was identified as a clear subtheme.

- **Nurses**

Many felt that nurses would be better suited to identify high risk patients or patients that would benefit from further intervention as they had good and early interaction with patients. Some even felt that nurses would be the best ‘champions’ for YVP in the EC, as they were more permanent, and more available. Taking into account the constraints EM physicians already are under, it is probably more a problem solving strategy than a negative attitude towards the doctor’s role. One respondent countered by saying that nurses complained that doctors were shifting all responsibility to them already!

- **Emergency Doctors**

In regards to the **EM practitioner’s role in YVP**, there were mixed reaction, with some outright negative comments, especially in the light of challenges already faced by EM physicians. Positive comments related to general principles of a good holistic doctor and suggest that **doctors should be involved in the brief intervention** done in the EC.

Communicating with the patient being an integral part of any doctor’s practice, it potentially only taking 5 to 10 minutes, and sometimes being able to have a big impact in a very short time by being there for the patient, were mentioned. If the patient is intoxicated, one could still speak to the family and thus offer support to them and the community, and speak to the patient the next morning. Negative responses related to limited time, no follow-up, intoxicated patients, and patients not even wanting to talk to doctors. Although some of the negative responses were valid concerns, in many ways the negative attitudes towards speaking to the youth violence patient goes against good medicine. As is shown through brief intervention literature<sup>19, 20, 21</sup>, it can be effective, but needs awareness, training and then practice to be able to incorporate prevention interventions into one’s practice. In terms of **EM Physicians’ identifying and referring of patients**, although it was clear that respondents did not have knowledge of any HBVIPs, the suggestions respondents made were in line with how existing HBVIPs function<sup>18</sup>. It was felt that if doctors could know risk, protective, mitigating and causative factors of youth violence, it would be possible to refer the right people at risk to an appropriate programme or a centre, thus possibly preventing recurrence and re-injury. In essence, if one understands these factors, one can match your

patient with the most appropriate intervention. Some respondents felt strongly that doctors can screen, but must also be part of starting the counselling as patient education is part of their practice. One respondent was adamant that one should not try to solve the issues in the EC, but should rather be able to refer with easy access to the person who can solve it. With regards to **doctors as champions for EC based YVP interventions**, some respondents were clear in their minds that EM physicians must be champions for HBVIPs<sup>22</sup>, as it would even potentially lead to decrease in overcrowding of ECs. There was also a discussion on the difference between a rotating EM registrar and a permanent post EM physician heading up an EC, and how important the support of the head of the unit would be for successful implementation. A possible solution to challenges faced in the EC was formulated in all three focus group discussions before the example of Hospital Based Violence Intervention Programmes (HBVIP) was introduced to the discussion through question 5. The plan consisted of first developing a screening tool to identify high risk patients, “flag” or identify high risk patients, refer them to a programme or follow-up system with or without the establishing of an EC trauma counselling centre, with a dedicated area for the intervention. Similarities between the three focus group and existing HBVIP format suggest a true engagement with the issues and seeking of an EC relevant solution. This again gives an overwhelming sense of positive attitudes towards the opportunity of contributing to YVP in the EC.

- **Facility- and Community-based social worker**

The social worker’s role discussed relates to sustainability in many instances, as social workers’ work load is already overfull in many cases. Secondary hospital social workers could refer to the community social worker, but a concern was that the patient would probably not go there, because after being sutured, there is no direct benefit for them compared to for example a food programme. A link was made to a follow-up opportunity when sutures are taken out at the day hospital 5 – 10 days after being seen for the first time. This could potentially be a second intervention contact time, possibly increasing the dose-related phenomenon of brief intervention success<sup>23</sup>.

- **Family Medicine Physicians as implementers / champions:** An interesting role-player only mentioned by one respondent was Family Medicine. Family physicians are located at all major district level hospitals and do outreach to primary care community health centres. With a combination of epidemiology and community orientated primary care perspectives, puts them in an ideal situation to contribute to the community connection of hospital initiated YVP. The suggestion speaks of innovative thinking and again engaging with the issues at hand.
- **Administrators as Champions:** One respondent spoke at length about non-medical people, including policy makers not experiencing how grave the intentional injury situation is, and thus it being vitally important to make these policy makers aware of the magnitude of the problem and allow them to become the champions for YVP.
- **Families' and Community's role:** One respondent felt strongly about discharging younger patients, especially underage, into the care of family, with the benefit of further contact with the community. One should also know the community, what has been done, and what other resources are available, and by asking them what kind of intervention they would like to see in their community. Community involvement especially in terms of mentor volunteers was named by two respondents as an important factor for success and effectiveness. A few concerning **negative attitude towards volunteerism** was noted in one focus group discussion after the facilitator gave an example of how volunteerism could be part of a strategy. The relevancy should not be underestimated, as issues surrounding either paid or unpaid volunteerism are important if seen in the light of majority of existing HBVIPs heavily relying on volunteerism<sup>24</sup>. This attitude could be further explored before implementation of a HBVIP is attempted, as it can influence the sustainability of such an intervention programme. On the **police's role**, most comments were quite negative, but one respondent commented on the possibility of the EC contributing to crime surveillance. An example from the literature is the very successful Cardiff model<sup>25</sup> which involves collection of anonymised data on the “who, what, when, where and how” of EC treated violence-related injuries, and combining this with violence-related incident statistics recorded by police. This allows for more accurate prediction of future violence patterns and the identification of so-called violence hot spots.

This can then be used to direct policing and even prevention interventions in those areas. The data-sharing component of this approach has been officially adopted throughout the United Kingdom as from July 2015<sup>26</sup>. Internationally, the Cardiff model is also being evaluated by cities in Brazil, the Netherlands, South Africa and the United States for possible implementation.

- **Identifying high risk patients and referral criteria to a HBVIP**, crystallised as a subtheme. The current system was not supportive of violence prevention and no screening tool or any form of screening for high risk patients of youth violence or referral criteria for intervention was in place. It was clear that respondents' knowledge level was very low to non-existent, but also with a realisation from respondents that with a little bit of training and an evidence-based approach identifying patients would be very easy to implement, especially looking at repeat visitors or multiple presentations. This again speaks of engagement of participants with the opportunity of YVP interventions in the EC and thus a positive attitude, even in the setting of limited knowledge on the theory of youth violence prevention.

## LIMITATIONS OF THE STUDY

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As participants were chosen randomly, but had to voluntarily agree to participate beforehand, there is a reasonable chance of volunteer bias, as volunteer participants could in general be more prone to positivity and problem solving attitudes. Another limitation is that emergency registrars are different from emergency physicians. Although registrars understand the challenges of EC work well, they are not necessarily future focussed, where as emergency physicians as heads of their units are already in the managerial and capacity-building roles. Registrars thus sometimes are preoccupied by the overwhelming task at hand and have difficulty in visualising themselves in the kind of role (such as heading an EC) where they could initiate an intervention. In terms of validity, this study was a focus group qualitative study on practicing emergency doctors' attitudes in Cape Town representative of EM registrars in Cape Town with a resultant strong internal validity of the study. It would be fair to say that there is limited generalisability beyond EM registrars in Cape Town and therefore external validity cannot be assumed.

## CONCLUSIONS

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Emergency registrars in Cape Town have a very limited knowledge of YVP in general, and in specific to the EC. They are faced with immense challenges that relate to patient load, violence directed to EC personnel, and a sense of despair or despondence in terms of ability to effect change. Major concerns about the possible implementation of YVP interventions are sustained funding and sustainability in general. These factors influence attitudes towards EC initiated YVP. Some registrars clearly could not make the shift in thinking to the EC manager role, but it took most of them less than an hour to transition from attitudes of despondency to seeking solutions to the problem, and implementation of a programme similar to existing HBVIPs. Notwithstanding obstacles and challenges faced by Cape Town emergency doctors, this study has shown an overwhelmingly positive attitude of Emergency Medicine Registrars towards the concept of YVP intervention that is initiated in the EC, and them being the champion or co-champion of it.

### ***Recommendations***

It could be beneficial to repeat this study with emergency physicians who are leaders of the various emergency units in Cape Town, as they have the sphere of influence to become a champion for YVP initiatives initiated in their EC, or even a full-fledged HPVIP. As there is a clear knowledge gap in terms of YVP in general and specific to the EC, it is recommended that emergency registrars in their training should receive theoretical and possibly practical training on this topic. This will lead to increased awareness of the issues surrounding YVP, the need to know resources available in the community they serve, and will make it eventually easier to implement a pilot intervention project in a selected EC.

Further research is needed on a relevant screening tool to identify high risk patients that will work for local ECs, and this could then be piloted as a starting point for future research and implementation of a youth violence prevention intervention in Cape Town ECs. For this pilot project to succeed, it is vital that different stakeholders are identified and communication initiated.

## References

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1. South Africa. Pretoria. Statistics South Africa. Comparison of the demographic profiles of two cities: Cape Town and Tshwane; 1997–2011 Report-03-09-082011, 2014, p11. [Internet] Available from: <http://beta2.statssa.gov.za/publications/Report-03-09-08/Report-03-09-082011.pdf>
2. Western Cape Government integrated provincial violence prevention policy framework August 2013 page 15. [Internet] Available from <https://www.westerncape.gov.za/sites/www.westerncape.gov.za/files/integrated-violence-prevention-policy-framework.pdf>
3. Hogg, MA, Cooper, JM, editors. The Sage handbook of social psychology (concise student Ed.). Los Angeles, CA: Sage 2007; 123-145
4. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2). 2006; pp. 77-101. ISSN 1478-0887.
5. Nicol A, Knowlton LM, Schuurman N, Matzopoulos R, Zargarani E, Cinnamon J, et al. Trauma Surveillance in Cape Town, South Africa: An Analysis of 9236 Consecutive Trauma Center Admissions. *Jama Surgery*. 2014; 149(6):549–56.
6. Western Cape Government integrated provincial violence prevention policy framework August 2013 final draft. [Internet] Available from <https://www.westerncape.gov.za/text/2013/September/violence-prevention-cabinet-policy-final.pdf>
7. Norman R, Matzopoulos R, Groenewald P, Bradshaw D. The high burden of injuries in South Africa. *WHO Bulletin* 2007; 85(9):695–701
8. Implementing the recommendations of the World Report on Violence and Health (WHA 56.24).2003.
9. Ward CL, Van der Merwe A, Dawes A. Youth Violence: Sources and Solutions in South Africa. UCT Press 2012 page 46-47
10. WHO Library Cataloguing-in-Publication Data, Global status report on violence prevention 2014. World Health Organization. ISBN 978 92 4 156479 3 (NLM classification: HV 6625) [Internet] Available from [http://www.who.int/violence\\_injury\\_prevention/violence/status\\_report/2014/en/](http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/)
11. Ward CL, Bakhuis K. Indigenous theories of children's involvement in gangs: Cape Town's young people speak out. *Children & Society*. 2009; 24: 50–62
12. Ward CL, Van der Merwe A, Dawes A. Youth Violence: Sources and Solutions in South Africa. UCT Press 2012 page 206
13. Oxford Textbook of Violence Prevention, Epidemiology, Evidence, and Policy Edited by Peter D. Donnelly and Catherine L. Ward Chapter 23 Oxford Textbooks In Public Health 978-0-19-967872-3 | Hardback | 27 November 2014
14. Ward CL, Van der Merwe A, Dawes A. Youth Violence: Sources and Solutions in South Africa. UCT Press 2012 page 356-357

15. Preventing injuries and violence: a guide for ministries of health. Geneva: World Health Organization; 2007
16. Williams, S., Brown, A., Patton, R., Crawford, M. J., AND Touquet, R. The half-life of the 'teachable moment' for alcohol misusing patients in the emergency department. *Drug Alcohol Dependence*, 2005; 77, 205-8.
17. Johnson SB, Bradshaw C, Wright J, et al. Characterizing the teachable moment: is an emergency department visit a teachable moment for intervention among assault-injured youth and their parents? *Pediatr Emerg Care* 2007; 23:553-9
18. Youth Alive! Intervention [Internet] Available from: <http://www.youthalive.org/caught-in-the-crossfire/>
19. Goodall, C. A., Oakey, F., and Ayoub, A. F. et al. A prospective randomised controlled trial of nurse delivered brief interventions for alcohol misuse to hazardous drinkers with alcohol related facial trauma. *British Journal of Oral Maxillofacial Surgery*, 2008; 46, 96-101.
20. Smith, A. J., Hodgson, R. J., Bridgeman, K., and Shepherd J.P. A randomized controlled trial of a brief intervention after alcohol-related facial injury. *Addiction*. 2003; 98, 43-52.
21. Gentilello, L., M., Rivara, F., P., Donovan, D., M. et al. Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Ann Surg* 1999; 230, 473–80.
22. Oxford Textbook of Violence Prevention, Epidemiology, Evidence, and Policy Edited by Peter D. Donnelly and Catherine L. Ward Oxford Textbooks In Public Health 978-0-19-967872-3 | Hardback | 27 November 2014
23. Ward CL, Van der Merwe A, Dawes A. Youth Violence: Sources and Solutions in South Africa. UCT Press 2012 page 392
24. Becker MG, Hall JS, Ursic CM, et al. Caught in the Crossfire: the effects of a peer-based intervention program for violently injured youth. *J Adolesc Health* 2004; 34:177-83.
25. Florence C, Shepherd J, Brennan I, Simon T. Effectiveness of anonymised information sharing and use in health service, police, and local government partnership for preventing violence related injury: experimental study and time series analysis. *British Medical Journal*. 2011; 342:d3313.
26. Information Standards Board for Health and Social Care. Information sharing to tackle violence. 2014 [Internet] Available from <http://webarchive.nationalarchives.gov.uk/+http://www.isb.nhs.uk/library/standard/265>

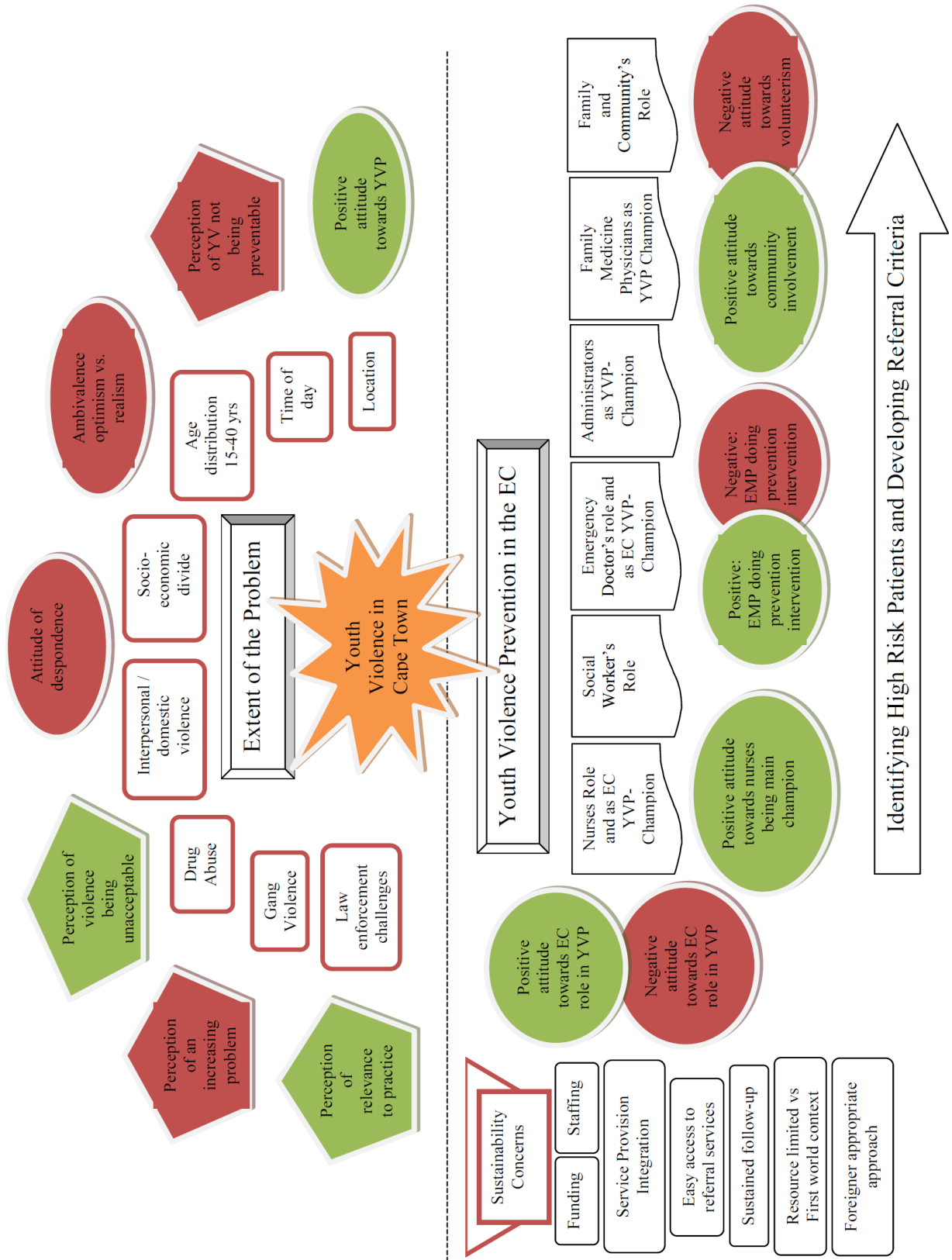
Table 1: Abbreviated focus group questions.

<ol style="list-style-type: none"> <li>1. In terms of trauma patients, how many violence-related intentional injuries do you see in the EC?</li> <li>2. What do you think of youth violence prevention?</li> <li>3. What do you think your role as EM practitioner is in youth violence prevention in the EC?</li> <li>4. If YVP needs to be implemented in the EC, what will it take to succeed?</li> <li>5. There are at least 20 Hospital Violence Intervention Programmes (HVIP) across the United States and a few across Europe, which have been shown to be variedly effective in terms of cost-benefit, reducing risk, re-injury and retaliation and other parameters of youth violence prevention, with some specific common features. (A generic example of a programme was presented) Knowing these facts, what is your opinion on the feasibility of such a programme at your facility?</li> </ol>
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Table 2: Main and sub-themes of study

1. Extent of the problem	2. Youth Violence Prevention in the EC
<ol style="list-style-type: none"> <li>a. Factors that influence youth violence</li> <li>b. Perceptions of relevance, significance, increased problem, and violence being unacceptable</li> <li>c. Attitude of despondence</li> <li>d. Ambivalence: Optimism vs. Realism</li> <li>e. Youth violence: Preventable vs. non-preventable</li> <li>f. Attitudes towards YVP in general</li> </ol>	<ol style="list-style-type: none"> <li>a. Sustainability concerns and challenges that will hamper YVP interventions</li> <li>b. Attitudes towards EC role in YVP</li> <li>c. Different role players and the idea of a EC YVP intervention 'champion'</li> <li>d. Identifying high risk patients and referral criteria to a HBVIP</li> </ol>

**Addendum 1: Diagram illustrating Main Themes from Focus Group discussion on Youth Violence Prevention**



# **Part D:**

## **Supportive documents**

- Official approval letter of Department of Surgery
- Official ethics approval letter of HREC
- Table of main themes with selected quotes from focus group discussions
- “Instructions for Authors” SAMJ
- Original Figure 1: Diagram illustrating Main Themes from Focus Group discussion on Youth Violence Prevention



UNIVERSITY OF CAPE TOWN

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**Department of Surgery**

**Departmental Research Committee**

**Dr Timothy Pennel**

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Anzio Road, Observatory 7925, South Africa

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Dr H Geduld  
Department of Surgery  
Division of Emergency Medicine  
Groote Schuur Hospital  
University of Cape Town

Dear Dr Geduld,

**RE: PROJECT 2015/056**

**PROJECT TITLE: Cape own Emergency Medicine doctor youth violence prevention study**

The above proposal was reviewed by the Department of Surgery Research Committee and I am pleased to inform you that the committee approved the study.

Please use the above project number in all future correspondence.

Yours sincerely

**Signed**

**DR T PENNEL  
CHAIRMAN: RESEARCH COMMITTEE**

"OUR MISSION is to be an outstanding teaching and research university,  
educating for life and addressing the challenges facing our society."



UNIVERSITY OF CAPE TOWN  
Faculty of Health Sciences  
Human Research Ethics Committee



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Website: [www.health.uct.ac.za/fhs/research/humanethics/forms](http://www.health.uct.ac.za/fhs/research/humanethics/forms)

19 August 2015

**HREC REF: 464/2015**

**Dr H Geduld**  
Division of Emergency Medicine  
J-Floor  
OMB

Dear Dr Geduld

**PROJECT TITLE: EM2014.010-CAPE TOWN EMERGENCY MEDICINE DOCTOR YOUTH VIOLENCE PREVENTION STUDY (MEd Candidate – Dr M de Man)**

Thank you for your response letter dated 05 August 2015, addressing the issues raised by the Human Research Ethics Committee (HREC).

It is a pleasure to inform you that the HREC has formally approved the above-mentioned study.

**Approval is granted for one year until the 30th August 2016.**

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.

(Forms can be found on our website: [www.health.uct.ac.za/fhs/research/humanethics/forms](http://www.health.uct.ac.za/fhs/research/humanethics/forms))

***We acknowledge that the following student:-Dr Martin de Man is also involved in this project.***

**Please quote the HREC reference no in all your correspondence.**

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Yours sincerely

Signed

**PROFESSOR M BLOCKMAN**  
**CHAIRPERSON, FHS HUMAN RESEARCH ETHICS COMMITTEE**

Federal Wide Assurance Number: FWA00001637.

Institutional Review Board (IRB) number: IRB00001938

This serves to confirm that the University of Cape Town Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research

Hrec/ref:464/2015

**Table of main themes with selected quotes from focus group discussions:**

<b>Extent of the problem</b>	Timing of violence	“I think it depends on the time: day of the week and day of the month. So during the week there is not that much but end of the month payday we get, I would say maybe up to 80% intentional injuries.”
	Male vs Female	“I tend to agree with the whole consensus that the demographic age group is highly 15-40 and male more than female”
	Location of violence	“I mean if you look at a place like, and I am not stereotyping, if you look at a place like Mitchells Plain and Khayelitsha, those are actually high risk areas and then everyone becomes high risk from there.”
	Gang violence	“...there is a lot of people who get caught in the crossfire, you see children with gunshots, they are not in my direct line, but they get caught.”
	Drug abuse	“...it is usually related to mostly alcohol and drugs and a lot of young people with trauma that was intentional.”
	Age distribution	“I would say between 15 and 40 years. That is where we get the intimate partner violence, the gangsterism, the stabbing of each other, the alcohol related stabbing of each other.” “And there is a lot of violence towards children and advanced age I have also seen...”
	Interpersonal or domestic violence	“Ja, intimate partner violence and domestic family violence as well.”
	Law enforcement	“Just to add on there, it is a big problem and from a policing point of view they are understaffed overworked, scared to go into areas where gang violence is prevalent. It’s a huge problem.”

	Reasons for violence	<p>“In an environment like Khayelitsha where you’ve got nothing, you are unemployed, you live in a shack, the men, the only way to express power is physical force. It’s all they’ve got and in that environment it has become acceptable to do that, so that if someone insults you, or there is an argument, restraint is what we would practice, and you would get good marks in our environment for showing restraint and not hitting someone.</p> <p>Whereas in that environment all you’ve got is physical force. So that’s what comes out, and if you live in that environment that is sort of the expectation. They don’t see it as something wrong, it doesn’t get reported to the police, this is what happens. If you give people worth, something to live for, they are well educated, better educated, they’ve got more chance, for me that is prevention.”</p>
	Socio-economic class	<p>“Usually violence comes about from a... and I am going to use this word: an abuse of freedom. Whereby someone is over empowered to the point where they feel they can then do whatever they want to do. So... I am not so sure where we would start”</p>
	Perception of relevance and significance of problem	<p>It is definitely a huge problem because we see such a large number of patients it has a ripple effect on the family as well, it is not only the fact that the patient presented to you, but it has an effect on the rest of the community and the family.”</p> <p>“But ja, the EC is the place to start. They are presenting to us...”</p>
	Perception of increased problem	<p>“And it is much higher than I previously thought and as I go through the years it feels as if it is increasing. I don’t have quantitative data for it but it feels like it is.”</p>
	Perception of violence being unacceptable	<p>“...violence that it sometimes shakes you in your boots that they attack an elderly person.”</p> <p>“Ja it is a lot, it’s outrageous. I personally think it is unacceptable. It is just too high.”</p>

Youth Violence Prevention	Preventable vs Non-Preventable	<p>“In theory it is preventable. Amm... I don’t know in our setting... It’s it’s just so difficult. With the gang involvement I think that is... I’m not sure that is a problem we are ever going to solve. Amm, and I think most of it comes from that. But I think in theory it is preventable.”</p> <p>“It can sort of decrease the incidence of youth violence but you will never be able to eradicate it. Because our nature we are human beings we are prone to violence... (silence) that is how we are built...”</p>
	Knowledge gap	<p>“I think I haven’t really heard of that, youth violence prevention, you know.”</p>
	Positive attitudes toward YVP	<p>“I think it is an excellent idea and concept. I don’t really know anything about the specifics about it and about the implementation of it.”</p>
	Need for broader perspective	<p>“There are a lot of things that one needs to work on if you really want to have a bigger impact. And I think what then one needs to do is to look at all the social determinates of violence and see how you frame the programmes that can respond to the issue”</p>
	Solutions offered for YV	<p>“Because if they don’t know anything else, they can’t possibly act any other way, they don’t know better or they don’t know of anything else. So if you can maybe school based sort of aged programs where you actually educate them that something else is actually possible. Reacting a different way is possible. Talking in a different way is possible.”</p>
	Attitude of despondence	<p>“So this is the dilemma: we want to help, we don’t have the time, we are scared we don’t have support and there are so few resources.”</p>

	Mixed Attitude: Optimistic vs Realistic	“I am not so sure where this... the mentality of violence actually comes about. So I am not so sure if awareness needs to be brought into the society as a whole, in communities as a whole, you know, because needs to be some sort of health education at some point. Where people are told: look violence is not the answer. We can't just keep, you know... because Ghandi once said: An eye for an eye and the world will soon be blind.”
	Engaging with the problem	“When I think about YVP, I think about kind of all violence prevention, and usually violence comes about from a... and I am going to use this word: an abuse of freedom. Whereby someone is over empowered to the point where they feel they can then do whatever they want to do. So... I am not so sure where we would start.”
	Negative attitude toward Volunteerism	“I think that is a very special case, because I don't know if I would do my job if I didn't get paid. I don't think anybody else would volunteer if they didn't get paid.”
<b>EM practitioner Role in YVP</b>	Positive attitudes towards finding a solution	“We don't mind, this is a real problem happening in the EC, we want to be part of the solution and if you come up with any checklists or something please share it with us and we really appreciate. And we have also learned suffering we are not alone in that place. This is a real problem and really needs solutions.”

	<p>Negative attitude towards EM physicians role in the EC</p>	<p>“...so cynical at that point, it’s 3am!”</p> <p>“But I also don’t think it is our job, I think we can identify, but I don’t think we’ve got the time to do it as it should be done, we are not trained to do it, but we also know that the social support systems are not there. The social workers, the system in general to actually deal with it adequately, the police can’t deal with it adequately so you are left in a situation of very little hope. So all of us become hard, you have to become hard.”</p> <p>“I think as EM physicians, I am not sure what the right term is, your role in the EC is limited, it’s a ... it’s a smallest percentage if there is anything to be done. So us as EM physicians it is really little contribution in terms of prevention in the EC. So the whole prevention will be, it’s a broad thing. So probably you will have to ask I think a couple of questions... It has to do with social circumstances, expenses, government input and all that. I mean it’s bigger than that, but as an EM physician we have little influence on prevention.”</p>
<p><b>EM Physician doing prevention talk themselves</b></p>	<p>Part of practice to do counselling</p>	<p>Positive: “I think obviously we have to identify but we can also start that conversation because patient education is also our responsibility.”</p> <p>Negative: “But I also don’t think it is our job, I think we can identify, but I don’t think we’ve got the time to do it as it should be done, we are not trained to do it, but we also know that the social support systems are not there. The social workers, the system in general to actually deal with it adequately, the police can’t deal with it adequately so you are left in a situation of very little hope. So all of us become hard, you have to become hard.”</p>
	<p>Speaking to the family</p>	<p>Even just to be able to speak to the family member, if that person is capable to understand, if they are intoxicated at least give the family member support if the community is struggling, the family is struggling.</p>

	EM physician identifying and referring patients	<p>“I think that is our role: identifying and referring appropriately to somewhere they can get help.”</p> <p>“But definitely we have a role to play by facilitating that they reach that service, but then the service has to be easily available.”</p>
		<p>“What would have been ideal I mean if the teachable moment is 48 hours, is to have a trauma counselling centre, every one that was a victim of trauma on Saturday comes on Monday to see the trauma counsellor. It’s practical you know.” “I suppose, I know a friend of mine is doing psychology, his masters in psychology and he is doing trauma counselling. So why not just get more of these guys. And he doesn’t have work unfortunately... But we need to create that you know.”</p>
	Triage as first step	<p>“You see the flagging part of it, it is very easy for us to do. Ya, if you know why...”</p> <p>“I think that is our role: identifying and referring appropriately to somewhere they can get help.”</p>
<b>Implementing YVP from the EC</b>	Currently reactive, not proactive	<p>“The current resource application and setup is reactive. It reacts to what has already happened. Resource allocation and setup of everywhere we work is not in preventative mode. It’s not conducive to the prevention in the long run.”</p>
	Nurses’ role	<p>“Even make a new sticker for them, in addition to our triage stickers, we will have that sticker on them, purple! (laughing).”</p>
	Doctors’ role	<p>“But definitely we have a role to play by facilitating that they reach that service, but then the service has to be easily available.”</p>
		<p>“Do you think that is our job?, because we are trained as clinicians. We are trained to see the patient load, and my feeling is that, yes, we’ve got to identify that...”</p>

	Social worker's role	So maybe you would refer... kind of... the social worker at your establishment could kind of keep tabs... like overlook or supervise a community member or a community social worker... something like that, like there was a safety net almost...
	Police's role	<p>"There is no consequence, so people can get away with it and the only way to do it is to actually get the police involved."</p> <p>"I think we should have police officers stationed in every single unit and a social worker stationed in every single unit 24 hours a day."</p>
	Family's role	"I think one thing, especially if you're talking about youth that are underaged, even less than 21 or where the parents are still the guardians, is that when you discharge you can actually discharge into the care of family."
	Community's role	Contact the community, the leader or the social worker in the area and ask what programs they have for youth prevention if there is any... hmmm...
	Systems	"What would have been ideal I mean if the teachable moment is 48 hours, is to have a trauma counselling centre, every one that was a victim of trauma on Saturday comes on Monday to see the trauma counsellor. It's practical you know." "I suppose, I know a friend of mine is doing psychology, his masters in psychology and he is doing trauma counselling. So why not just get more of these guys. And he doesn't have work unfortunately... But we need to create that you know."

<p><b><u>HBVIP implementati on feasibility at Cape Town EC</u></b></p>	<p>Sustainability</p>	<p>“I think it is definitely doable but it would be heavily reliant on the community involvement. Because we as doctors would not be able to follow these patients up and our social worker system is already so overwhelmed, we already don’t have enough social workers for the patients that we have. So we would have to get the community involved and we would be very reliant on their enthusiasm and their interaction with the patients and follow up and that sort of thing.”</p> <p>“So feasibility in theory it is possible but in practice resources is a problem, you know, and there is a lot of resistance also where are you going to source people from in a way and budget plans, it is... I see it being very complicated.”</p>
	<p>Staffing</p>	<p>“... but I think the biggest thing is going to be case load and staff.”</p>
	<p>Community involvement</p>	<p>“I think it is definitely doable but it would be heavily reliant on the community involvement. Because we as doctors would not be able to follow these patients up and our social worker system is already so overwhelmed, we already don’t have enough social workers for the patients that we have. So we would have to get the community involved and we would be very reliant on their enthusiasm and their interaction with the patients and follow up and that sort of thing.”</p>
	<p>Integration into EC service provision</p>	<p>“But I think it need to be part of service provision, you know, I think at the moment that is our main aim at the EC.”</p>
	<p>Include foreigners</p>	<p>“We are a multicultural society. And we do have a lot of foreigners coming from the north or northern parts and I think any program, any strategy or intervention will have to include them as well.”</p>
	<p>Third World Country considerations</p>	<p>“It could possibly work, but I think we also need to take note that those things are done in first world countries we live in a third world country.”</p>

	Nurses as champions	“No they can also identify and maybe start the conversation and the referral path where it doesn’t necessarily need to come from us. Because they also know how violence affects communities.”
	Doctors as champions	<p>Negative: “Do you think that is our job?, because we are trained as clinicians. We are trained to see the patient load, and my feeling is that, yes, we’ve got to identify that...”</p> <p>Positive: “But you need, you need to. As an emergency physician you are a permanent fixture of that unit and at the moment we are rotating every three months, we don’t feel, I don’t feel fixed to anything (laughing). So I think we..., if you are the head of a unit I think you cannot say, you can’t say no to that.”</p>
	Administrators as champions	“We because we are in front rooms, we see this violence and we agree 100% that it is a problem. And the person who is involved, the innocent person who is being shot or stabbed also agrees that it is a problem. But somebody who is in Green Point...Because normal people, those ones who are certain areas probably are also, you know, policy makers, they don’t experience that. Ja, they don’t think it’s bad and you know that is where the battle is.”
	Family Medicine as implementers / champions	“I also think that the Family Medicine people have a big role to play here, because they are based at the day hospitals so they can educate from there, or get, what do you call it?, start measures there so if they go to the bigger centres, so you don’t need to do interventions at such a level so that, how do I put this?, spend all the..., do the work at community centre level, most of the work, so when they come to you, you don’t have to spend as much resources.”

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### **Author Guidelines**

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Named authors must consent to publication. Authorship should be based on: (i) substantial contribution to conception, design, analysis and interpretation of data; (ii) drafting or critical revision for important intellectual content; or (iii) approval of the version to be published. These conditions must all be met (uniform requirements for manuscripts submitted to biomedical journals; refer to [www.icmje.org](http://www.icmje.org)).

### **CONFLICT OF INTEREST**

Authors must declare all sources of support for the research and any association with a product or subject that may constitute conflict of interest.

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Provide evidence of Research Ethics Committee approval of the research where relevant.

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Identifying information should not be published in written descriptions, photographs, and pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) gives informed written consent for publication. The patient should be shown the manuscript to be published. Refer to [www.icmje.org](http://www.icmje.org).

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References to ethnic classification must indicate the rationale for this.

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Shorter items are more likely to be accepted for publication, owing to space constraints and reader preferences.

**Research articles** (previously 'Original articles') not exceeding 3 000 words, with up to 6 tables or illustrations, are usually observations or research of relevance to clinical medicine and related fields. *References should be limited to no more than 15.* Please provide a structured abstract not exceeding 250 words, with the following recommended headings: *Background, Objectives, Methods, Results, and Conclusion.*

**Scientific letters** will be considered for publication as shorter **Research articles**.

**Editorials**, Opinions, etc. should be about 1000 words and are welcome, but unless invited, will be subjected to the SAMJ peer review process.

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**Forum articles** must be accompanied by a short description (50 words) of the affiliation details/interests of the author(s). Refer to recent forum articles for guidance. Please provide an accompanying abstract not exceeding 150 words.

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**Obituaries** should be about 400 words and may be accompanied by a photograph.

**Guidelines** must be endorsed by an appropriate body prior to consideration and all conflicts of interest expressed. A structured abstract not exceeding 250 words (recommended sub-headings: *Background, Recommendations, Conclusion*) is required. Sections and sub-sections must be numbered consecutively (e.g. 1. Introduction; 1.1 Definitions; 2. etc.) and summarised in a Table of Contents. References, appendices, figures and tables must be kept to a minimum.

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## MANUSCRIPT PREPARATION

Refer to articles in recent issues for the presentation of headings and subheadings. If in doubt, refer to 'uniform requirements' - [www.icmje.org](http://www.icmje.org). Manuscripts must be provided in **UK English**.

**Qualification, affiliation and contact details** of ALL authors must be provided in the manuscript and in the online submission process.

**Abbreviations** should be spelt out when first used and thereafter used consistently, e.g. 'intravenous (IV)' or 'Department of Health (DoH)'.

**Scientific measurements** must be expressed in SI units except: blood pressure (mmHg) and haemoglobin (g/dl). Litres is denoted with a lowercase 'l' e.g. 'ml' for millilitres). Units should be preceded by a space (except for %), e.g. '40 kg' and '20 cm' but '50%'. Greater/smaller than signs (> and <) and '40 years of age'. The same applies to  $\pm$  and  $^{\circ}$ , i.e. '35 $\pm$ 6' and '19 $^{\circ}$ C'.

**Numbers** should be written as grouped per thousand-units, i.e. 4 000, 22 160...

**Quotes** should be placed in single quotation marks: i.e. The respondent stated: '...' **Roundbrackets** (parentheses) should be used, as opposed to square brackets, which are reserved for denoting concentrations or insertions in direct quotes.

**General formatting** The manuscript must be in Microsoft Word or RTF document format. Text must be single-spaced, in 12-point Times New Roman font, and contain no unnecessary formatting (such as text in boxes, with the exception of Tables).

## ILLUSTRATIONS AND TABLES

If tables or illustrations submitted have been published elsewhere, the author(s) should provide consent to republication obtained from the copyright holder.

**Tables** may be embedded in the manuscript file or provided as '**supplementary files**'. They must be numbered in Arabic numerals (1,2,3...) and referred to consecutively in the text (e.g. 'Table 1'). Tables should be constructed carefully and simply for intelligible data representation. Unnecessarily complicated tables are strongly discouraged. Tables must be cell-based (i.e. not constructed with text boxes or tabs), and accompanied by a concise title and column headings. Footnotes must be indicated with consecutive use of the following symbols: \* † ‡ § ¶ || then \*\* †† ‡‡ etc.

**Figures** must be numbered in Arabic numerals and referred to in the text e.g. '(Fig. 1)'. Figure legends: Fig. 1. 'Title...' All illustrations/figures/graphs must be of **high resolution/quality**: 300 dpi or more is preferable, but images must not be resized to increase resolution. Unformatted and uncompressed images must be attached individually as '**supplementary files**' upon submission (not solely embedded in the accompanying manuscript). TIFF and PNG formats are preferable; JPEG and PDF formats are accepted, but authors must be wary of image compression. Illustrations and graphs prepared in Microsoft Powerpoint or Excel must be accompanied by the original workbook.

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**Book references:** Jeffcoate N. Principles of Gynaecology. 4th ed. London: Butterworth, 1975:96-101. *Chapter/section in a book:* Weinstein L, Swartz MN. Pathogenic Properties of Invading Microorganisms. In: Sodeman WA jun, Sodeman WA, eds. Pathologic Physiology: Mechanisms of Disease. Philadelphia: WB Saunders, 1974:457-472.

**Internet references:** World Health Organization. The World Health Report 2002 - Reducing Risks, Promoting Healthy Life. Geneva: World Health Organization, 2002. <http://www.who.int/whr/2002> (accessed 16 January 2010).

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**Figure 1: Diagram illustrating Main Themes from Focus Group discussion on Youth Violence Prevention**

