TRAUMATISING SKIES
U.S. Drone Operations and Post-Traumatic Stress Disorder (PTSD) Among Civilians in Yemen
Alkarama is a Swiss-based, independent human rights organisation established in 2004 to assist all those in the Arab World subjected to, or at risk of, extrajudicial executions, disappearances, torture and arbitrary detention. Acting as a bridge between individual victims in the Arab world and international human rights mechanisms, Alkarama works towards an Arab world where all individuals live free, in dignity and protected by the rule of law. In Arabic, Alkarama means dignity.
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U.S. DRONE OPERATIONS AND POST-TRAUMATIC STRESS DISORDER (PTSD) AMONG CIVILIANS IN YEMEN
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EXECUTIVE SUMMARY

Between July and September 2014, Alkarama conducted a survey to understand the presence of trauma on a sample of individuals living in Yemen, in areas where drone operations are being carried out by the United States (hereinafter “U.S.”). The study was aimed at evaluating the prevalence of Post-Traumatic Stress Disorder (hereinafter “PTSD”) symptoms among civilians. After screening more than 100 individuals, men and women, boys and girls, we found strong common patterns of anxiety, stress, paranoia, insomnia and other trauma symptoms across gender and age. The specificity of the study is that it incorporates both individuals who have lost a direct family member to a drone attack and individuals who have not but still live under drones. We found that these two groups are exhibiting similar symptoms and are suffering from severe stress. We concluded that the simple fact of living under drones has psychological consequences that derive from the constant fear of being killed or having a relative being killed.

The study also brings to the fore the legal shortcomings and implications that surround the operation of drones in Yemen. While the application of International Humanitarian Law (IHL) and Human Rights Law with regard to drone operations continues to be debated within the international community, what we call a “legal black-hole” has instead come to dominate aspects of regulation, accountability and retribution. This scenario is but exacerbated by the peculiar nature of the drone technology that is yet to be engaged with adequately in legal as well as ethical terms and serves to facilitate trauma among civilians. We hence stress on the importance of addressing the implications of drone attacks through all possible legal instruments by discussing international and national legal frameworks in this context.

With this study, our aim is to reduce the gap between the abstraction of a military personnel sitting behind a screen triggering the strike and the overwhelming as well as constant mental suffering of civilians on the ground. This study is thus a testimony to the presence of a direct causal link between the one powerful side and the other. It is fundamentally an attempt to highlight – to the international community, of which the U.S. is an integral part – that drone operations have direct consequences on Yemeni civilians, particularly on their mental integrity; that the suffering involved amounts to cruel, inhumane and degrading treatment; and that the current U.S. drone operations in Yemen hence amount to a gross violation of Yemeni civilians’ basic human rights.

Alkarama Foundation wholeheartedly thanks the National Organization for Drone Victims in Yemen for their precious help in carrying out the study on the ground.
A civilian in Pakistan described drone operations as amounting to a “slap in the dark”\(^\text{1}\). This image is emblematic of a feeling of betrayal and treachery that is perceived by the civilians living in areas where drone operations are carried out. This very feeling of fear, of being killed haphazardly, without knowing the reason why, perhaps simply during one’s sleep, has been prevalent in the PTSD screening study Alkarama conducted in Yemen from July to September 2014.

For a large swath of population in Yemen, living under a sky that has become a constant source of trauma is an everyday reality. The sky in the Yemeni countryside, or the U.S. drones’ playground, regularly inflicts violence without any warning or reason on people that are already vulnerable to both poverty and conflict. An entire generation is increasingly succumbing to a way of life that is marked by unpredictability, uncertainty and brutal violence that may suddenly manifest in the form of a drone attack at anytime and anywhere. There is no protection from it, no way of escaping it and, most strikingly, no mechanism to demand redress, justification or simply justice.

U.S. drone attacks have thus emerged to shape the perceptions, fears and life choices of a large proportion of the Yemeni population. In turn, this ‘generation of drones’ – which is inevitably identifying the skies as a medium of death – is suffering tremendously from mental diseases that also culminate into physical distress. This study is hence located in a precarious time and a peculiar place, where the skies are becoming traumatic and a generation is being lost to constant fear and suffering.

The repercussions of drone operations on civilians living in areas where the skies are traumatic, especially those who have not directly lost a relative or loved one to a drone strike has been largely ignored within policy as well as academic discussions. Nevertheless, the concern over the potential psychological impact of drones has been shared by human rights and humanitarian organisations such as the OHCHR\(^\text{2}\) and ICRC\(^\text{3}\) who pointed towards the lack of measurement of the consequences of the constant presence of drones on mental health. The study takes on this difficult task of shedding some light on the mental state of civilians who attempt to lead their lives under the murmurs of drones. In doing so, this study presents the findings from a survey conducted by Alkarama in the Yemeni countryside that assesses the prevalence of PTSD among civilian populations. What makes this study particularly unique is that it takes into account people who have lost their loved ones to drone attacks as well as those who are simply living under the traumatic skies.

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The findings presented in section 3 of this report are, to say the least, quite disturbing. The majority of respondents are severely affected by trauma by the sheer presence of drones above their heads, whether or not they have lost a relative to a strike. Another worrisome trend is visible among children, whose childhood is being lost to constant fear and stress, and whose future is increasingly shaped by feelings of revenge against those who command the drones.

These findings add to the globally mounting concerns about civilians living in areas where drone attacks are conducted. Calls to address the legal aspects of drone operations, especially those that have strong repercussions on civilians, have been increasing. In line with this, section 4 of the report engages with the legal implications of drone attacks, since such a legal approach is fundamental for addressing the trauma that civilians living under drones face in their daily lives. It charts the importance of both IHL and Human Rights Law in the context of drone operations, underlying the growth of a “legal black-hole” that is increasingly dominating all aspects related to drone attacks and risks undermining the fundamental rights and guarantees that should be respected at all times. The section also raises ethical questions with regard to the particular nature of drone technology, another important point of this report since the peculiar form of warfare it enables does not only create legal ambiguities but also ethical concerns associated with the ability of a powerful State to keep inflicting violence on a vulnerable people without taking any risks for itself.

The combination of unclear legal and policy mechanisms around drone operations and technology closely intersects with the perpetuation of PTSD among Yemeni civilians living under traumatising skies. A complete dearth of institutional mechanisms with regard to regulation, accountability and retribution has served to perpetuate trauma, loss of life and disruption of everyday activities. Strongly addressing these shortcomings will be instrumental, not only for delivering justice to already vulnerable people, but also for stabilising their lives in a country experiencing instances of violence on numerous fronts.
In 1990, the People’s Democratic Republic of Yemen (South Yemen) and the Arab Republic of Yemen (North Yemen) were formally unified as the Republic of Yemen, despite hostilities between the North and South had existed for nearly two decades amidst Cold War politics and ideological oppositions. Soon after the formal unification, a Southern secessionist movement was born leading to a brief civil war in 1994. The South was quickly subdued and the Northern government based in Sana’a exerted its control over the whole country. Yemen continues to be marred by this legacy with relations between the North and South continuously posing difficulties in the maintenance of stability in the country.

Yemen is located amidst two regional heavyweights, Saudi Arabia and Iran, which have been pushing to further their influence over the capital Sana’a. In 2004, fighting began in the northwest of the country between the government and the Houthis, a Zaydi Shia minority, leading to six rounds of fighting between 2004 and 2010 with both parties not respecting the different peace agreements over the years. The rebels have accused Saudi Arabia for supporting the Yemeni government, while the government has accused Iran of meddling in its internal matters.

2008 saw a revival of the southern secessionist movement that began as a popular socio-economic protest. Furthermore, inspired by demonstrations in Tunisia and Egypt, and fuelled by complaints over high unemployment, poor economic conditions and corruption, public demonstrations erupted demanding the resignation of President Ali Abdallah Saleh in 2011. The February 2012 presidential elections saw the victory of Abd Rabbuh Mansur Hadi, who launched a National Dialogue Conference in 2013 in which the Houthis also participated. Nonetheless, by September 2014, the Houthis started to exert their strength over the Yemeni government by taking control of key sites in Sana’a and demanding the reversal of government policies especially with regard to fuel subsidies. Most recently, Yemen has been pushed to the edge of a civil war as the Houthis forced President Hadi to flee the capital. Although the main battleground remains between the Houthi forces and those loyal to the President, both President Hadi and the Houthis must face al-Qaeda in the Arab Peninsula (AQAP).

Through a union of the Saudi and Yemeni branches of al-Qaeda, AQAP was formed in January 2009. AQAP has been responsible for numerous attacks in the region and has also attempted to attack the U.S. Simultaneously, AQAP has been engaged in fierce fighting with both the Houthis and Yemeni government forces, which, according to AQAP, are acting as a proxy for the U.S. It is at the crossroads of such a tumultuous political setting marked by instability, uncertainty and violence, that the civilian population of Yemen finds itself.

Against the backdrop of decades of political instability, the Yemini economy has also suffered considerably. The World Bank indicates that Yemen is one of the poorest countries in the Arab world, with poverty, already rising prior to the latest political crisis, having risen further from 42% of the population in 2009 to 54.5% in 2012. Additionally, not only has Yemen one of the highest population growth rates in the

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world, but it is also one of the most food insecure countries in the world and has scarce water resources\textsuperscript{11}. Such factors, coupled with high unemployment, make economic recovery in Yemen highly uncertain and therefore gravely threaten the well-being of a population grappling with extreme vulnerability.

The U.S. drone operations in Yemen are therefore set in a climate where the civilian population, already one of the most vulnerable in the world, is increasingly struggling with instability, violence and poverty. Although, the U.S. have never declared war on Yemen, the threat posed by AQAP has been used to justify a dramatic increase in air and drone strikes under the Obama administration\textsuperscript{12}. London-based Bureau of Investigative Journalism estimates that between 2002 and 2014 there have been 71-83 confirmed drone strikes in Yemen, killing 362-531 people, including 64-83 civilians among which 7 children. The Bureau also estimates possible extra drone strikes ranging between 101-120, having killed 345-553 people, of which 26-68 are civilians including 6-11 children\textsuperscript{13}.

Yemen’s ties with the U.S. have been reinforced under the Obama administration and the Yemeni government, which has given American forces a free rein to participate in military operations over large areas. Drone operations have, in turn, emerged as the “go-to method” for the U.S. for tackling threats posed by AQAP\textsuperscript{14}.


\textsuperscript{13} The Bureau of Investigative Journalism. “Get the Data: Drone Wars.” http://www.thebureauinvestigates.com/category/projects/drones/drones-graphs

3. ALKARAMA CIVILIAN PTSD SCREENING STUDY IN YEMEN

From 9 to 16 February 2013, London-based forensic psychologist Peter Schaapveld conducted a research during a fact-finding mission to Yemen on the psychological impact of drone strikes. He found that 92% of the population he surveyed suffered from PTSD, with children being the demographic most significantly affected. Their fear of drone would even have led women to miscarry. Dr Schaapveld reported that the majority of the population was suffering, and that a whole generation was traumatised\textsuperscript{15}. His study showed that “\textit{virtually all interviewed were found to be suffering from formal abnormal psychological conditions. The majority (71\%) was found to be suffering from Post-Traumatic Stress Disorder (PTSD). Other severe abnormal psychological conditions were found including anxiety, depression, dissociative experiences, panic reactions, hysterical-somatic reactions, exaggerated fear responses and abnormal grief reactions}”\textsuperscript{16}.

In a similar spirit and taking further Alkarama’s 2012-2013 research on the impact of the U.S. drone attacks in Yemen on the civilian population\textsuperscript{17}, as well as on their legal implications, we decided to survey a sample of individuals who live in Yemeni villages where drone operations are being carried out by the U.S. Our goal was to understand whether or not civilians living under drones exhibit symptoms of PTSD similar to those who have directly lost a family member as a result of drone strikes. A Stanford-NYU report has qualitatively taken up a similar endeavour to highlight trauma among those “living under drones” in Pakistan\textsuperscript{18}. This study builds upon this understanding and takes recourse to both quantitative as well as qualitative elements to specifically focus on PTSD in the context of Yemen. Our belief, which finds an empirical grounding in this study, is that the simple fact of living under drones has psychological consequences that are no different from those caused by the loss of a relative in a strike. In this sense, we are trying to show that the fear of being killed or having a relative killed by a drone at any moment and without knowing the reasons that might cause such a death is of such intensity that it leads to PTSDs and thus amounts to inhumane and degrading treatment of civilians.

3.1 METHODOLOGY

From July to September 2014, Alkarama conducted a study to assess the level of Post-traumatic Stress Disorders (PTSDs) among the civilian population living in Yemeni villages where American drones are operational.

For this purpose, our field researchers surveyed 100 adults from different age groups, among whom 50 are women and 50 are men, along with 27 children, among whom 13 are girls and 14 are boys, who were selected randomly in two villages. In order to keep the respondents as well as our researchers out of harm’s way, we have anonymised everyone throughout this study.

The survey to conduct the PTSD screening is based on the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association\textsuperscript{19}. We designed the screening in such a way that the panel

\textsuperscript{15} Speaker’s briefing, Dr Peter Schaapveld, 5 March 2013, available at http://appgondrones.wordpress.com

\textsuperscript{16} \textit{Ibid}, p.1


chosen represented an equal number of men and women, from different age categories, and inclusive of both individuals who have suffered the loss of a relative in a drone attack and those individuals who have not. Furthermore, we designed a separate survey for the PTSD screening of children in order to take into account the peculiar way children develop different symptoms.

For both adults and children, the PTSD survey included a preliminary introduction in order to ensure that the respondents clearly knew what a drone and a drone attack were, as well as to ascertain that they were aware of drone operating in their region. Our study was thus designed to highlight the direct link between the trauma arising from living under drones to PTSD.

The surveys were first translated from English into Arabic and were conducted in Arabic by Alkarama’s research team in Yemen. They were carried out in the villages of Qawl (in the district of Jahana, region of Sana’a) and Al Sirin (in the district of Sanhan, region of Sana’a). Both villages are situated in the South-East of Sana’a and are in regions where drone operations are carried out by the U.S. against alleged Al Qaeda militants.

The questions asked as part of the PTSD survey were closed-ended, thereby implying that the respondent was asked a question, which could only be answered with either ‘Yes’, ‘No’, or ‘Not Giving an Answer’. The last section of the screening, however, was left open-ended for the interviewer to assess the respondent’s link between his/her PTSD and drone attacks based on their personal interaction, while also providing space for the interviewer to add further observations. This section thus enabled us to collect valuable qualitative data in addition to the quantitative data collected from the PTSD questionnaire in the form of comments by the interviewers, which often also included testimonies by the respondents. The survey questionnaires for both adults and children are available in the Annexes for further reference.

The following chart shows the age and gender repartition of the adult sample:

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**Age and gender distribution among adult respondents**

Chart explanation: For a total of 100 adults, 50 are female, 50 are male. Among female respondents: 14 are aged between 14 and 25 years old (F_14-25); 15 are aged between 25 and 40 years old (F_25-40); 12 are aged between 40 and 55 years old (F_40-55); and 9 are aged 55 and older (F_55). Among male respondents: 15 are aged between 14 and 25 years old (M_14-25), 15 are aged between 25 and 40 years old (M_25-40); 11 are aged between 40 and 55 years old (M_40-55); and 9 are aged 55 and older (M_55).

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This study presents the findings separately for adults and children, even if all respondents show common patterns of PTSD symptoms. A specific focus is also directed towards understanding the effects on the most vulnerable people. We believe that, in order to fully comprehend the suffering of a victim of inhumane and degrading treatment, it is also important to take into account subjective elements like the particular vulnerabilities of the victim and the cultural specificities of Yemeni society.

In order to understand the charts that follow, these tables explain the codes used in them to designate specific groups and categories:

<table>
<thead>
<tr>
<th>Group Description</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Female adults</td>
<td>Results for the total of adult female respondents</td>
</tr>
<tr>
<td>Male adults</td>
<td>Results for the total of adult male respondents</td>
</tr>
<tr>
<td>Male adults VF</td>
<td>Results for the total of adult male respondents who had lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>Female adults VF</td>
<td>Results for the total of adult female respondents who had lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>Female adults not VF</td>
<td>Results for the total of adult female respondents who had not lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>Male adults not VF</td>
<td>Results for the total of adult male respondents who had not lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>All VF</td>
<td>Results for the total of adult female and male respondents who had lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>All not VF</td>
<td>Results for the total of adult female and male respondents who had not lost an immediate family member due to a drone strike</td>
</tr>
</tbody>
</table>

Table 1: Codes for charts concerning adults

<table>
<thead>
<tr>
<th>Group Description</th>
<th>Description</th>
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<tbody>
<tr>
<td>All girls</td>
<td>Results for the total of girls respondents</td>
</tr>
<tr>
<td>All boys</td>
<td>Results for the total of boys respondents</td>
</tr>
<tr>
<td>Boys VF</td>
<td>Results for the total of boys respondents who had lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>Girls VF</td>
<td>Results for the total of girls respondents who had lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>Girls not VF</td>
<td>Results for the total of girls respondents who had not lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>Boys not VF</td>
<td>Results for the total of boys respondents who had not lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>All children VF</td>
<td>Results for the total of boys and girls respondents who had lost an immediate family member due to a drone strike</td>
</tr>
<tr>
<td>All children not VF</td>
<td>Results for the total of boys and girls respondents who had not lost an immediate family member due to a drone strike</td>
</tr>
</tbody>
</table>

Table 2: Codes for charts concerning children
3.2.1 PREVALENCE OF PTSD

The screening questionnaire that is based upon the Diagnostic and Statistical Manual of Mental Disorders scores the respondents in the following manner to assess PTSD:

• 1 to 3 questions answered as yes: few symptoms of PTSD
• 4 to 9 questions answered as yes: PTSD likely
• 10 and more questions answered as yes: respondent displays many symptoms of PTSD

As per this understanding, our findings reveal that, among adults, PTSD is extremely prevalent, with 72 respondents displaying many symptoms of PTSD, 27 respondents deemed as likely to have PTSD and only 1 respondent showing a few symptoms.

![Distribution of PTSD symptoms among respondents](image)

The above chart indicates the magnitude of the prevalence of PTSD amidst the adult respondents of our study.

3.2.2 COMMON PATTERNS

Common patterns among all respondents regardless of age, gender or whether or not they lost an immediate family member as a consequence of a drone strike show the following symptoms:

• Constant anxiety;
• Constant fear to be killed or to have a relative killed by a drone attack;
• Sleep-related troubles, including insomnia, nightmares and enuresis for children;
• Deep emotional distress especially when drone operations resume;
• Depression and sadness;
• Anger and frustration towards the Yemeni and US governments;
• Feelings of detachment from the ordinary world;
• Feelings of being not worthy of protection or attention from the government.
 Civilians who witnessed drone attacks on the ground are experiencing constant fear and insomnia. Even civilians who do not have casualties in their families express trauma syndromes in their daily lives. Comments underlying a “desire for revenge” are common especially among men. During the day, the sounds of aerial vehicles make them stop their daily activities, while at night, they suffer from insomnia. A recurring pattern is the feeling of disregard for their human dignity by both the U.S. and the Yemeni government. We will present in this part answers in detailed charts. However, charts presenting the percentages of positive answers to main questions are available in Annex C and show the prevalence of certain symptoms depending on age and gender for victim and non-victim families.

As explained above, fear that a drone might attack them or their relatives or community is extremely high across all categories. To the question “Are you afraid that a drone attack might harm you, your family or your community?” 92% answer yes. The following chart shows the prevalence of this fear, in particular among women but also among all other categories:

21 More symptoms were reported. For example, Ahmed a young farmer who hadn’t lost a family member to drone attacks says that he cannot stay in the kitchen because of the sound emitted by the fridge in the kitchen. It makes him particularly anxious because it gives him the feeling that there is a drone above him. Other respondents complained of increased blood pressure when they hear that drone operations are resuming in the region or after hearing about a drone attack.

22 The charts in Annex C only take into account positive answer within valid answers while the charts in this part include all answers (i.e. yes\no\no answer).
Sleep deprivation is a common pattern across all categories of respondents. **83% of the individuals answered yes to question 22: “Are you troubled by sleeping problems?”**

Our surveyors noted, “The common denominator in most of the cases is the feeling that life has no value and that death could happen at any moment and without apparent reason. This shared feeling hinders most everyday activities in the villages and results in constant anxiety and fear. The deterioration of the living conditions in general, as added to the lack of healthcare services and the mental suffering of the populations are aggravating their general feeling of hopelessness, frustration and anxiety.” For example, numerous respondents used expressions such as “futility of life” in order to describe their detachment from life.

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23 See Chart 9 in Annex C
These symptoms are further revealed in common trends in answers to questions like “do you have repeated, distressing memories, or dreams?” to which 97% of adult respondents answered positively\(^24\). In the same vein, **94% of adult respondents answered yes** to question 14: “do you act or feel as if the event – i.e. drone attack – were happening again (flashbacks or a sense of reliving it)?”\(^25\). All categories show similar responses regardless of whether the respondents directly experienced the attack as witnesses or as relatives of casualties, as this comparative chart shows:

\(^{24}\) The very high rate of positive answers amongst adult male respondents to this question. Indeed, 100% of male adults who lost a family member report having repeated, distressing memories, or dreams linked to drone attacks, while 94% of male adults respondents who have not lost a relative answer positively to this question. (See Chart 1, Annex C).

\(^{25}\) See Chart 2, Annex C.
The constant fear of being targeted or having a relative targeted can also be seen in answers to questions asking if the respondent is feeling mostly “on guard” or whether he/she has an exaggerated startle response to a sudden noise. It highlights the constant state of tension that is present in the lives of the population. **80% of adults answered positively** to Question 25: “Do you feel “on guard” most of the time – i.e. being “super alert” or watchful?” and **75% answered yes** to Question 26: “Do you have an exaggerated startle response most of the time?”

When looking at the comparative charts, we notice that these symptoms are also prevalent among women as they particularly express deep concern for their children and male relatives. Among men, if the symptoms of feeling on guard and having exaggerated startle responses to sudden noises or events are mostly prevalent in men having lost a relative, at least half of the men who have not lost also suffer similar symptoms.

**Comparative chart, Q. 25: Feeling “on guard” (“super alert” or watchful)**

**Comparative chart, Q. 26: An exaggerated startle response**

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26 See Chart 12, Annex C.
3.2.3 SPECIFICITY OF VICTIMS’ FAMILIES

Victims’ families are particularly vulnerable to PTSD. They show symptoms that are both caused by the way their loved ones died as well as by the fear of losing another relative in the same way. The majority of men interviewed reported being haunted by the image of their relatives’ bodies and emphasized their fear of being killed in the same way. Most of them are now also providing for the wife and children of their deceased relatives. This is particularly difficult given the extreme poverty in these communities that further heightens vulnerabilities and economic pressures.

The fact that none of victims’ families are being heard by the authorities, Yemeni or American, nor being offered any form of redress or explanation, is leading to a rise in anger among male respondents. Depression and sadness is rampant as well as the feeling of “not being treated like human beings”. Among the victims’ families, the knowledge that drone operations are about to resume serves as a constant reminder about the loss of their relatives, and perpetuates their feelings of hopelessness, anger and sadness, as well as fear of losing other members of their family27.

3.2.4. EFFECTS ON THE MOST VULNERABLE

3.2.4.1. EFFECTS ON CHILDREN

The study found that children too are expressing severe sadness and fear when they hear sounds of aircrafts or drones, or when they hear news that drone operations are about to resume in the region. More than half (51%) of the children screened said that drones got in the way of their general happiness in the two weeks preceding the screening.

27 Vivian Salama, “Death From Above”, op. cit.
When we asked the children if they were feeling upset – i.e. scared, angry, sad, guilty – when they think or hear about drones, the answers were almost all positive especially among girls, 100% of whom answered yes. These charts show the comparative and overall results of answers to the question:

![General and comparative charts, Q. 10: Feeling upset when you think about it or hear about the event](image)

The answer to this question is further reinstated by a similar trend in the answers to the question around whether they had upsetting thoughts or images about drones that came into their heads when they did not want them to. 87% of the children respondent answered positively to the questions. Girls particularly are more affected and the percentage is extremely high regardless of age or situation.
Sadness and depression is also assessed by the lack of interest children show in activities that they used to enjoy. When asked whether they are having much less interest in doing things they used to do, the answers are a striking yes for 85% of them.

This great fear is combined with other symptoms, especially anxiety. The anticipation of another attack creates a recurrent sense of fear that is but furthered by anxiety. It is thus no surprise that answers to the question “Are you afraid that a drone attack might harm you, or your family, or your community?” highlight that 96% of the children feel this way. A comparative table of the answers given to this question between the different categories of children shows this common trend.
In general, the feeling of fear is further exacerbated among the children when they hear sounds that resemble the buzzing of drones. Therefore, 74% of children respondents say that they are jumpy or easily startled when someone walks behind them or when they walk in the street and/or hear any sudden sound.

We also discovered a worrisome trend among boys who often talk about strong feelings of anger, hatred and a desire for revenge against those responsible for the drone attacks. They clearly identify the US and Yemeni governments as the perpetrators of violence that creates this uncertainty in their lives.

28 This symptom is particularly prevalent amongst women and girls (See chart 12, Annex C).
It is important to note that the children who had lost a family member have PTSD deriving from both the fact that they lost a loved one as well as due to the fear that a drone attack might strike again and kill another member of their family. For example, the son of one the victims of a drone attack, 9-year-old Taha is suffering tremendously and sleeps only in the lap of his older brother. He is constantly scared of losing his brother too. 11-year-old Muad, who lost his father to a drone attack in January 2013 in the village of Khawlan, is experiencing serious problems of speech due to trauma.

We also observed that boys who had lost a family member are more likely to answer yes to the question regarding feelings of irritability or having fits of anger. Although the figures drop significantly for boys who have not lost a family member, they stay very high for girls and for all the other categories.

Among girls, the prevalence of anxiety, stress and sadness is generally higher. Those who lost a family member – like 12-year-old Imen, who lost her mother and 12-year-old Yosra, who lost her father, both in a drone attack in 2013 – stopped the enjoyable activities that they used to engage in, such as playing outdoors. 13-year-old Saqra, who lost her uncle, stopped painting and is constantly afraid of losing her brother and father. Girls who have not lost a family member tend to ask if the same thing will happen to their relatives and are constantly worried about their fate.

In addition, we have numerous children from both victims’ families and families who have not lost a relative, who suffer from enuresis, especially when they hear that a drone attack happened or rumours that they are about to take place. Such manifestations of fear are bound to have long-term psychological and physical effects on these children.

In the community of Qawla (district of Jahanah, in the region of Sana’a), the death of a teacher killed by a drone strike had a particularly strong effect on the children of the school where the teacher used to give class. A strong desire for revenge now animates many children, especially boys, who associate it with a feeling of hatred and anger. Some of the boys have lost interest in school. One of the students of the deceased teacher even said that he wanted to dedicate his life to avenge his teacher’s death and is no longer interested in receiving an education.

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29 Chart 6 in Annex C shows the prevalence of this symptom especially amongst children and women.
Lastly, children too, like adults, display a high level of sleep related troubles like insomnia or nightmares. While the majority of the children show symptoms of sleep related troubles (67% of them), the girls in particular, are most affected by nightmares, insomnia and enuresia.
3.2.4.2. EFFECTS ON WOMEN

Effects on women should be understood in the peculiar social and economic system that defines the Yemeni countryside. Here, nearly all married women are stay-at-home mothers who rely solely on their husbands or other men in the family for protection as well as supporting the children. Social vulnerability in such a setting is easily exacerbated by becoming a single mother. Furthermore, the women’s economic vulnerability is further amplified as a consequence of losing the family’s sole breadwinner, the man, in a country where no social care is provided. Drone attacks targeting male members of the society thus have a strong repercussion on the lives of women in these areas.

Women tend to show higher levels of symptoms like fear of losing a child or another relative. **100% of the women, who have not lost a relative answer yes** to the question, *are you afraid that a drone attack might harm you, your family or your community?* Women respondents also reported in the comments section that they increasingly feared social gatherings, including wedding celebrations, thereby further inhibiting their movements in the public sphere. Some specifically noted that they “avoided making too much noise” and “staying for too long in a large group” when participating in local functions or celebrations.

For example, Fatima, aged 40, married and mother of five reported that even sounds of joy and celebrations were causing an exaggerated startle reaction among women during festivities. It was also noted that mothers of teenage boys are particularly afraid that their children will be targeted or killed simply as collateral damage of a drone attack. Atiqa, a 55-year-old mother of three who rarely steps out of her home, said that whenever she heard of a drone attack in the area, her blood pressure problems became more severe, forcing her to stay in bed for several days.

Finally, it is imperative to highlight certain unusual effects that were reported by other studies. There have been reports of women miscarrying as a direct consequence of a fear arising from drones. Rumours that drones are able to see inside the houses and watch women have also spread, leading some women to live under the constant fear that, even inside their homes, they are watched by American soldiers, hence affecting their behavioural patterns as they believe they have lost all their privacy. Overall, women and girls show higher positive results as one can see in the overall charts contained in Annex C. For example, 100% of women who lost relative and 95% of those who have not, reported being easily startled. In the same vein, women and girls in both categories have higher results concerning sleeping problems.

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30 Ibid
31 See Charts 1, 2, 3, 9 and 12 in Annex C.
A 2013 report by the European Parliament highlighted that the “present sense of uncertainty as to the applicable legal standards, the rapid development and proliferation of drone and robotic technology, and the perceived lack of transparency and accountability of current policies have the potential of polarizing the international community, undermining the rule of law and, ultimately, of destabilizing the international security environment as a whole”32.

This section is intended to highlight the legal issues arising from the use of drones by the U.S. in Yemen and to explain their implications for both lawyers and neophytes. We want this section to be engaging for both the international and U.S. communities by going further than the previous debates and highlighting practical consequences of the use of drones on the lives of civilians living under them. We believe it is of primary importance that people around the world be made aware of the practical consequences that will arise, should the issue of accountability and transparency surrounding the use of drones is not properly addressed by law and policy-makers. The “legal black hole” that U.S. policy has been creating, first by narrative and then by action, constitutes a real threat to the rule of law at the domestic and global levels, as well as to the most fundamental rights of individuals across the world, including the right to life, the right to be free from inhuman, cruel and degrading treatment, and the right to health, education and development33.

In light of our findings, we will present what we consider to be the most problematic issues in terms of law, both at the international and domestic level in the U.S. and in Yemen. We argue that the trauma of civilians is one of the many results of an approach to international law and use of force adopted by the U.S. especially after 11 September 2001. This has led to the undermining of the rule of law and fundamental safeguards of both Americans and non-Americans, both in the U.S. territory and abroad. Although many questions arise as to the legality of drone attacks themselves34, the point of this report is to discuss the effects of the current policy on the civilian population living under drones.

The use of drones by the U.S. is the root cause of the trauma and disorders shown by the civilian population in Yemen. We believe that the trauma among civilians is so deep and widespread that it amounts to cruel, inhumane and degrading treatment35. We are conscious that sceptics will oppose this study on the ground that the prevalence of PTSD is a “normal reaction” to a situation of conflict and violence. However, we believe that the suffering of Yemeni civilians living under drones is instead the result of an arbitrary policy that can and must be changed. In essence, both International Humanitarian Law (IHL) and Human Rights Law are built on this very idea of avoiding such suffering.

It is important to note that the applicable legal framework to drone operations in Yemen, whether IHL or Human rights Law is still debated; the latter, however, does not cease to apply in times of armed conflict36.


33 Jens David Ohlin, “Birth of a shadow doctrine: How a small group of lawyers launched a war against international law from torture to drone strikes, international law is under attack in the U.S”, Salon, Saturday Feb 7, 2015

34 The question of the legality of drones strikes per se has already been addressed in several reports including a report from Alkarama (“Licence to Kill. Why the American Drone War on Yemen Violates International Law”, Alkarama Foundation, 2013) and the Stanford /NYU “Living Under Drones report” Opct.

35 We will thus focus on this particular issue of trauma as a consequence of drone operations, confident that the numerous reports and articles written about the legality of drone strikes are already shedding light on the issues raised by the strikes themselves.

Furthermore, the prohibition of torture and inhumane treatment is applicable at all times and no circumstances whatsoever justify a violation of this *jus cogens* norm, neither war nor counter-terrorism. We will thus start by assessing the situation in terms of IHL and complete it with aspects of International Human Rights Law (IHRL). We will then elucidate the problematic approach of the U.S. and show how it contradicts both international and domestic law. After briefly looking at Yemeni law, we will address the issues of accountability and redress arising from the violations committed in different legal frameworks. Lastly, we will end by laying down questions regarding the drone technology itself that we believe facilitates the trauma described earlier in this report.

### 4.1 LAW OF WAR

The legality of drone strikes in the framework of the law of armed conflict has been already dealt with in several reports, both in terms of *jus ad bellum* and *jus in bello*\(^{37}\). We have thus decided to focus on issues directly related to the trauma faced by Yemeni civilians who are living under drones.

#### 4.1.1. JUS AD BELLUM

The rules of *jus ad bellum* assess the legality of the use of force of a State in the territory of another sovereign State, in this context, the U.S.' use of drones strikes in Yemen\(^{38}\). The justifications provided by the U.S. Department of State are based on its asserted right to self-defence, as well as on the argument that the U.S. is “in an armed conflict with Al Qaeda, as well as the Taliban and associated forces”\(^{39}\). Moreover, the U.S. also claimed to have authorisation from the Yemeni government, or at least until January 2015 when the Houthis seized power, which engages with the question of sovereignty\(^{40}\). We will thus briefly present what we consider to be problematic in these two justifications regarding civilians facing trauma in Yemen\(^{41}\).

Firstly, for the justification based on the existence of an armed conflict against Al Qaeda, the Taliban and associated forces, it is crucial to raise the following concerns. The scope of this armed conflict is so unclear and vague that it gives to the U.S. a broad “licence to kill” anyone, anywhere and at any time. The precise geographical or temporal scope of this conflict remains unclear, and who can be considered as an “enemy” or a potential target also remains ambiguous, especially when considering the vagueness of the terms “associated forces”. We will see below that instead of clarifying these crucial points, the current U.S. law and practice has given the executive branch arbitrary powers to define these criteria according to aspects that are neither public nor subjected to proper judicial review or congressional scrutiny.

Secondly, it is also important to question the validity of the authorisation given by the Yemeni government to conduct drone strikes in its territory. The successive governments of Ali Abdullah Saleh and Abd Rabbu Mansour Hadi both lacked genuine democratic credibility and accountability. While the first president

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37 “Living under Drones” Report, *op cit*

38 Article 2(4) of the UN Charter, States are forbidden from using force in the territory of another State unless in the following hypothesis : (a) the second State consents, or (b) the first, targeting, State has a right under international law to use force in self-defence under Article 51 of the UN Charter, because (i) the second State is responsible for an armed attack against the first State, or (ii) the second State is unwilling or unable to stop armed attacks against the first State launched from its territory. This right to use force is still submitted to the necessity and proportionality requirements.


41 We will discuss the consequence of the preemptive self-defense doctrine in relation to the concept of imminence of threat as understood by the US.
became notorious for a kleptocratic system and corruption that undermined legislative powers for more than three decades, the second president did not break with the practices of authoritarianism set by his predecessor despite coming to power after a popular uprising. In addition to the lack of a credible democratic system, the Yemeni executive also has an extremely poor record with regard to respecting the rule of law and fundamental human rights of Yemeni citizens. For the past 10 years, Alkarama has documented numerous cases of arbitrary detention, torture extrajudicial killings and enforced disappearance that have become a systematic practice under both governments. The protection of the Yemeni people has not been a concern for the successive governments, who can claim virtually no genuine democratic legitimacy, a situation that has been worsened by a complete lack of accountability for human rights violations committed by State actors. The call of the Yemeni Parliament, in December 2013, to stop drone strikes is exemplifying this situation: the vote was merely symbolic since it was not binding and was considered simply as a recommendation to the executive as motions passed by the legislative branch can be struck down by the President. We hence doubt the legitimacy of such governments to give a “blank check” to a foreign power to use force in an arbitrary manner without any mechanisms of accountability available to the people living in the country.

A vague, yet all-encompassing drone war carried out by the U.S. on the basis of an authorisation by a country where the government neither fully represents the interests of its population nor is committed to protecting them, has served to weaken the Yemeni civilians’ already poor legal protection. It is hence not surprising that a bulk of those surveyed for this report expressed their feeling of “not being considered as human beings” either by the U.S. or by their own government, as their lives “did not matter”. The resentment towards both the U.S. and the Yemeni governments is nothing but an extension of an ambiguous war authorised by an unaccountable regime. Moreover, this situation has effectively created a vacuum of responsibility where neither the force carrying out the attack nor the local government are held accountable for the violations committed and the suffering inflicted on civilians.

4.1.2. JUS IN BELLO

Under the law of armed conflict, targeted killing is only lawful when the target is a “combatant” or “fighter”, or, in the case of a civilian, only for such time as the person “directly participates in hostilities”. In addition, IHL’s elements to assess the legality of the use of force in a conflict apply here: the killing must be a military necessity; the use of force must be proportionate in such a way that any anticipated military advantage is evaluated in light of the expected harm to civilians in the vicinity; and everything feasible must be done to prevent mistakes and minimise harm to civilians. These standards apply to all situations
of conflict regardless of whether the enemies are considered as terrorists or not.

As far as civilians are concerned, several provisions protect them from suffering, especially unnecessary suffering. For example, reprisal or punitive attacks on civilians are prohibited. Article 3 common to the Geneva Conventions that regulate the conduct of armed conflict set the basic guarantees that all actors should respect in times of conflict and is considered as customary law. It gives specific expression to the obligation of humane treatment in, inter alia, provisions prohibiting “violence to life and person, in particular murder of all kinds, mutilation, cruel treatment and torture”, as well as “outrages upon personal dignity, in particular humiliating and degrading treatment”.

The fundamental problem of the U.S. approach, in terms of jus in bello, that is leading to what we consider inhumane, cruel and degrading treatment of the civilians living under drones, is primarily the complete lack of information regarding who can be targeted, when and where. The concept of “associated forces” expands the notion of co-belligerency from a State-centric approach to an atomised individual leading to a potential extension of definition to all sorts of groups that are not necessarily in an armed conflict with the U.S. Moreover, the concept is problematic since it can also extend to individuals who are not directly participating in any hostility against the U.S. or not participating to any hostility at all. This problem is highlighted by the fact that, following the strikes, U.S. authorities have rarely acknowledged civilian deaths, claiming that all the victims were “militants” or “terrorists”. The absence of a clear definition of “who” can be targeted is worsened by the U.S. approach towards the concept of imminence, which has been emptied of its meaning and serves to broaden the scope of situations that can trigger an attack.

It is hence important to stress that in practice, the arbitrary standards on which the U.S. base their current drone policies have direct consequences on the lives of civilians. For example, respondents were complaining that they were “too afraid to gather because it can trigger a strike”. In other words, civilians do not know or understand the criteria upon which they may be targeted, which creates a paranoia exacerbated by having personally witnessed strikes on other civilians who were not engaging in hostilities. We will develop these issues further in the section on Domestic law in the U.S.

4.2 HUMAN RIGHTS LAW

The legality of a killing outside the context of armed conflict is governed by human rights standards, especially those concerning the use of lethal force, and has been discussed in many reports including by the United Nations Special Rapporteur on extrajudicial, summary or arbitrary executions. What we wish to discuss here is the applicability of IHRL, especially the norms forbidding cruel, inhumane and degrading treatment in the context of civilians living under drones. We are conscious of the fact that the U.S. would not accept such an extraterritorial applicability but we nevertheless believe that there is room for such an
argument from a Human Rights perspective. As such, a situation of conflict does not mean that Human Rights Law is not applicable especially in situations like Yemen, where the threshold of armed conflict is not clearly set\(^52\). Moreover, a co-application of these two frameworks entails that, when IHL does not provide a clear rule, it is appropriate to draw guidance from Human Rights Law\(^53\), as affirmed in international jurisprudence.

We consider here the applicability of the Convention against Torture (CAT) and of the International Covenant on Civil and Political Rights (ICCPR) – to which the U.S. accessed respectively in April 1988 and October 1994 – especially Article 16 of the CAT and Article 7 of the ICCPR. As our study focuses mainly on the mental suffering of civilians living under drones, we mainly address the obligation not to inflict cruel, inhumane or degrading treatment. Moreover, since this mental suffering is a direct consequence of a constant violation, or a threat of violation of the right to life, the legality of targeted killings in Yemen in terms of IHRL becomes even more important.

To begin with, we argue in favour of a functional approach to the criteria of effective control and extraterritorial applicability of conventional human rights obligations\(^54\). IHRL obligations are twofold: they entail positive and negative obligations. In other words, States have the obligation, on one side, to implement human rights but also the obligation, on the other side, not to violate human rights. We argue that, even if a State does not have the effective control necessary to implement its human rights obligations, it still has an obligation not to violate them. To put it simply: a State may not have the ability to ensure the rights of people abroad, but this should not be an excuse to harm them. If harm has been committed, the State therefore has an obligation to ensure accountability – through independent investigation and prosecution of those responsible for it – and redress for the victims of such violations.

A functional interpretation of such effective control is based on the idea that States must ensure the observance of human rights in five primordial ways, namely by:

- Not violating human rights;
- Having in place systems which prevent breaches of human rights;
- Investigating complaints of human rights abuses;
- Ensuring accountability of their agents who violate human rights;
- Compensating the victims of breaches of human rights and ensuring redress mechanisms\(^55\).

If we consider that these elements constitute the basic functions assumed by every State by virtue of the CAT, a “functional” test would see a State effectively exercising “jurisdiction” whenever it falls within its power to perform any of these five functions. When examining the situation in Yemen, we can argue that the U.S. is at least violating its obligations to investigate, as well as to ensure accountability and compensate the victims of drone attacks, let aside the primary violation of the right to life in cases where the drone strike is violating both IHL and human rights standards on the use of force. Thus, even if U.S. forces do not have effective control over the whole Yemeni territory, they still have control over their forces and

\(^{52}\) Ibid, para. 29.
\(^{54}\) The reference to “any territory” in Article 2 of the CAT, like in Articles 5, 11, 12, 13, and 16, refers to prohibited acts committed not only onboard a ship or aircraft registered by a State party, but also during military occupation or peacekeeping operations and in such places as embassies, military bases, detention facilities, or other areas over which a State exercises factual or effective control.
\(^{55}\) See concurring opinion of Judge Bonello in European court of Human Rights, Judgment, Grand Chamber, Case Of Al-Skeini And Others v. The United Kingdom, (Application no. 55721/07), 7 July 2011.
the operations carried out in such a way that it gives them the material capacity “not to harm” civilians. As such, we consider that the U.S. should not harm civilians in a way that amounts to a violation of Article 16 of the CAT.

Furthermore, we suggest to the sceptics of our argument to imagine a situation where a sniper is firing from U.S. territory using a remotely controlled weapon in order to kill someone in another territory. In such a setting, the U.S. cannot argue that while the individual committing the act is located within its jurisdiction, the direct victim of his strike is conveniently located outside.66

Additionally, we argue that effective control cannot be restricted to purely territorial control with physical presence on the ground but is extended to individuals and situations where control can be effective in other ways as well. Territorial control is not necessarily the main object of control per se; rather the aim often is to control the individuals within a territory, not the territory itself in the geographical sense of the term. Therefore, we stress that having the ability to take an individual’s life, in a complete arbitrary manner, is a form of absolute control over these individuals. Given the amount of intelligence and the possibility to strike discretionally without prior warning or effective independent oversight, in fact offers a higher level of control than even soldiers on the ground could enable. Therefore, it is crucial to also engage with human rights standards in the context of drone attacks in Yemen.

4.3 DOMESTIC LAWS IN THE U.S. AND YEMEN

In this section we explain what we believe is problematic in U.S. domestic law. We also briefly expose the issues surrounding Yemeni law, but since the country has been undergoing political instability, the main problem we will discuss is the lack of legal, institutional and judicial mechanisms to protect and hear the claims of civilians living under drones.

4.3.1. DOMESTIC LAW IN THE U.S.

Several reports and articles have already analysed the many issues in U.S. domestic law surrounding the use of drones with regard to targeted killings57. The reports have highlighted inter alia issues related to the extensive definition, by U.S. law makers, of the scope of the armed conflict in which the U.S. asserts it is engaged in; the blurriness of the criteria for individuals who may be targeted and killed; the absence of any substantive or procedural safeguards to ensure the legality and accuracy of killings; and the absence of accountability mechanisms58. These elements led many voices across the U.S. political landscape to speak up against the policy, rightly claiming that it was “out of control”59. In the context of this report, we focus on issues that are most relevant to the trauma documented by engaging with the legal standards used by the U.S. to carry out drone strikes, the policy surrounding it, as well as the practice itself.

56 Ibid.
57 “Living under Drones” Report, op cit
58 Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Study on targeted killings”, op.cit para 87: “The failure of States to comply with their human rights law and IHL obligations to provide transparency and accountability for targeted killings is a matter of deep concern. To date, no State has disclosed the full legal basis for targeted killings, including its interpretation of the legal issues discussed above. Nor has any State disclosed the procedural and other safeguards in place to ensure that killings are lawful and justified, and the accountability mechanisms that ensure wrongful killings are investigated, prosecuted and punished. The refusal by States who conduct targeted killings to provide transparency about their policies violates the international legal framework that limits the unlawful use of lethal force against individuals.”
4.3.1.1 LEGAL FRAMEWORK

The legal framework surrounding drone operations is unclear and lacks legal certainty, while the definitions of terms that are used to define the legal standards are extremely broad. In other words, a dearth of clarity or certainty is not only blurring the structure of the applicable law but also of its content, i.e. the definitions of terms and standards.

The Department of Justice (hereinafter “DoJ”) White paper on the “Lawfulness of a Lethal Operation Directed against a U.S. Citizen who is a Senior Operational Leader of Al Qa’ida or an Associated Force” describes the legal rationale behind drone strikes as follows:

Where the “following three conditions are met, (...): (1) an informed; high level official of the U.S. government has determined that the targeted individual poses an imminent threat of violent attack against the United States; (2) capture is infeasible, and the United States continues to monitor whether capture becomes feasible; and (3) the operation would be conducted in a manner consistent with applicable law of war principles."

The DoJ also states that, in addition to strikes being carried out in foreign countries which either gave their consent to such strikes or are proven to be unwilling or unable to incapacitate the individual causing an imminent threat, the U.S. “retains its authority to use force against Al Qa’ida and associated forces outside the area of active hostilities when it targets a senior operational leader of the enemy forces who is actively engaging in planning operations to kill Americans”. However, it adds that any U.S. operation would be part of the non-international armed conflict between the U.S. and Al Qaeda, even if it were to take place away from the zone of active hostility. This extremely broad definition of the territorial criteria of IHL applicability is rather bewildering since the applicability of IHL is based on ratione loci criteria that have to be limited to the zone of active conflict area. Such an approach is strongly contested as it expands the state of war beyond the territory of the actual parties to a conflict and allows U.S. drones to strike whenever they want anywhere in the world extending the “legal black hole” to potentially the whole world.

Furthermore, apart from the absence of any explanation as per the criteria used to assess who can be considered as “senior operational member of Al Qai’da”, the main issue remains the interpretation of “imminence” that empties the word of its meaning. According to the DoJ, the “condition that an operational leader present an “imminent” threat of violent attack against the United States does not require the United States “to have clear evidence that a specific attack on U.S. persons and interests will take place in the immediate future”. The concept of imminence, by its very nature and definition, must be instant, overwhelming and leaving no means for deliberation. Most importantly, in addition to the broadening of the territorial and personal scope of such strikes, the temporal scope itself becomes unlimited with this extended interpretation.

60 Department of Justice White Paper “Lawfulness of a Lethal Operation Directed Against a U.S. Citizen Who is a Senior Operational Leader of Al Qa’ida or an Associated Force, available at: http://upload.wikimedia.org/wikipedia/commons/7/74/020413_DOJ_White_Paper.pdf
61 Department of Justice White Paper “Lawfulness of a Lethal Operation Directed Against a U.S. Citizen Who is a Senior Operational Leader of Al Qa’ida or an Associated Force, p.1
62 Moreover, IHL as a legal framework made for the exceptional circumstances of armed conflict should be based on restrictive interpretation of any extension of its temporal or territorial expansion. See: Ms. Christine Beerli, ICRC Vice-President, Keynote Address on the opinion of ICRC on The Scope of Application of International Humanitarian Law, Proceedings of the Bruges Colloquium, 13th Bruges Colloquium 18-19 October 2012 available at: https://www.coleurope.eu/sites/default/files/uploads/page/collegium_43_webversie.pdf
63 Department of Justice White Paper “Lawfulness of a Lethal Operation Directed Against a U.S. Citizen Who is a Senior Operational Leader of Al Qa’ida or an Associated Force, p.7
64 “The requirement of international law that measures taken avowedly in self-defence must have been necessary for that purpose is strict and objective, leaving no room for any measure of discretion”, International Court of Justice, Case Concerning Oil Platforms (Islamic public of Iran v. United States of America), Judgement ICI Reports 2003, para 73.
definition of imminence. Such a definition, when combined with the elements described above, contributes to the lack of clarity, certainty and safeguard that surrounds the use of lethal force.\textsuperscript{65}

The Special Rapporteur has stressed the similarity between the legal standards described above with the “ticking bomb” argument and the threat it poses to fundamental human rights and the rule of law. In reality, the situation, where the individual posing a threat cannot be captured at all is very rare, making the test for anticipatory self-defence impossible to meet for all strikes. \textit{This hypothetical presents the same danger as the “ticking-time bomb” scenario does in the context of the use of torture and coercion during interrogations: a thought experiment that posits a rare emergency exception to an absolute prohibition can effectively institutionalize that exception}.\textsuperscript{66} We believe that, just like in the case of torture, reducing a whole practice rationale to an extreme thought experiment is opening a Pandora’s Box extending the power to kill without prior judgement or warning or any explanation or redress to all individuals in a dangerously arbitrary way. This is the power that the U.S. authorities have been using in Yemen, and which, in practical terms, is causing the civilians living under drones to experience constant trauma.

\textbf{4.3.1.2 THE POLICIES – SECRECY AND LACK OF OVERSIGHT}

The legal black hole created by the lack of legal guarantees only becomes bigger by the secrecy surrounding U.S. drone policy. For example, the exact number of strikes, the names of possible targets and the selection process of these targets are not disclosed.\textsuperscript{67} The U.S. targeted killing program operates without meaningful oversight outside of the executive branch, and essential details about the program still remain a secret, including what criteria the government uses to put people on CIA and military kill lists, as well as how much evidence is required before it does so. Without the presence of civil society, lawyers and journalists investigating the effects of these attacks on the ground, it would be impossible to know who is being killed, let aside if they are directly participating in hostilities or not.

This has severe consequences on due process and the rule of law, which has strong implications on civilians’ everyday lives. The importance of due process, especially when it involves violations of the right to life and security and liberty, is fundamental not only for international law but also American law. The current drone program, however, amounts to one where the U.S. executive plays the role of the judge, the jury, the prosecution and the executioner, in a process governed by secrecy. The responsibility of actors involved in the decision-making process and those carrying out the strikes is never assessed, neither before – by putting in place effective checks and balances from the Congress or the judiciary, or by exercising proper judicial oversight – nor after, by acknowledging civilian casualties and offering redress. The reluctance or a conscious strategy by the U.S. to not provide information of the drone program and the targeting criteria hinders the rule of law domestically in the U.S. and in Yemen as well as internationally. Coupled with an absence of any legal mechanism that can clarify the atmosphere of ambiguity and reinforce checks and balances, fundamental rights are not protected, thereby undermining the role of an independent judicial...
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system. At a practical level, this situation has created a feeling of lawlessness and arbitrariness on the ground, resulting in long-time psychological effects on civilian populations.

4.3.1.3 THE PRACTICE

The U.S. drone policy includes two types of practices that must be explained to better understand the trauma documented in this report, namely “covert drone strikes” and “signature strikes”.

Direct effects of the “covert drone strikes” policy on civilians: Covert action is defined under U.S. law as “an activity [...] to influence political, economic, or military conditions abroad, where it is intended that the role of the United States Government will not be apparent or acknowledged publicly”68. This policy implies that drone strikes are unannounced and its reasons are not made public (since they are considered as classified). Drone strikes involve targeting individuals whose identities are both known and unknown, and with varying degrees of preplanning. Moreover, the U.S. concept of “imminence” detailed earlier is so broad that it widens the temporal and material scope of the choice of target and does not necessitate prior proofs. This covert drone strikes policy leads to two types of trauma: (1) before a strike, the population does not know the circumstances in which a drone might strike; and (2) after a strike, the victims’ families cannot find out why their relatives was targeted and are unable to prove his innocence or obtain redress since no legal mechanism is made available to hear their claims.

Direct effects of “signature strikes” on civilians: A signature strike is one in which the U.S. conducts targeting without knowing the precise identity of the individuals targeted. Instead, the individuals match a pre-identified “signature” of behaviour that the U.S. links to militant activity or association. This type of strike is even more controversial because they result in a larger number of killings simply on the basis of their behaviour or affiliations without prior knowledge of their identities. It considerably broadens the spectrum of people who can be targeted and increases the arbitrary nature of such killings. This technique creates an additional stress in the sense that individuals are constantly watching their behaviours thinking that it might resemble “terrorist behaviour”. Furthermore, the very nature of the behaviour that may trigger a drone attack is not known to civilians, making it impossible for them to predetermine possible targets, thereby aggravating anxieties among those who feel that they will either be targeted because of their behaviour or because of their location at a certain point in time next to people who have an alleged suspicious behaviour69.

The secrecy surrounding the rationale behind these two types of attacks is thus creating a perpetual state of paranoia. Therefore, these policies are intrinsically dangerous for civilians who do not know when and why they may be targeted. For example, after a strike on a wedding procession, several women respondents expressed their fear for attending wedding celebrations, saying that they generally avoid gatherings or making too much noise. A 40-year-old mother of five specifically said that even sounds of joy are causing an exaggerated startle reaction amongst women during wedding celebrations70.

4.3.2. DOMESTIC LAW IN YEMEN

The domestic legal landscape in Yemen is characterised by lawlessness and an absence of accountability for human rights violations committed by both the Central government and other forces present in the country. The judiciary lacks independence and is not willing to offer redress to the victims, an issue repeat-
edly raised by Alkarama over the past 10 years with regards to the several documented cases of summary execution, enforced disappearance, torture and arbitrary detention in the country. The parliament lacks genuine law-making powers in order to enact laws that can serve as a basis for protecting civilians.

Despite numerous demands from civilians to receive justice and redress, the Central government has not provided any genuine accountability mechanism for the families of civilian victims of drone attacks. This also highlights an issue that we will touch upon in the following sections: the ethically and legally unacceptable idea that Yemeni civilians cannot be granted the same rights as other civilians in other parts of the world, where individual rights are protected by the rule of law. By not providing redress to Yemeni civilians, the U.S. reinforces the lawlessness in which the Yemenis are trapped, leaving them in the middle of the legal black hole created by both U.S. and Yemeni governments. We further believe that since the Yemeni government is not able to protect the rights of the people within its territory, the U.S. has a greater responsibility to ensure that its activities are not violating the rights of Yemeni civilians, and is morally obligated to provide them with an accountability mechanism when lives are lost due to its actions.

4.4 VIOLATIONS AND ACCOUNTABILITY

Having explained why we believe International Human Rights Law should be applicable to drone operations, we also argue that the level of mental suffering caused by the U.S. amounts to cruel, inhumane and degrading treatment, in particularly because of the direct causal link between U.S. drone operations and PTSD among civilians, as demonstrated in this report. The effects of the mental trauma and pain highlighted in this report exceed the unavoidable level inherent to both armed conflict and counter-terrorism in a law enforcement framework and constitute a violation of Article 16 of the CAT. Moreover, the trauma endured by civilians is both unnecessary and resulting from indiscriminate and disproportional policy, resulting in a violation of Article 3 common to the four Geneva Conventions. Finally, these violations are also a consequence of a lack of accountability leading to a feeling, amidst Yemeni civilians, of being exposed to completely arbitrary violence inflicted by the U.S.

4.4.1 THE TRAUMA OF CIVILIANS AS CRUEL, INHUMANE AND DEGRADING TREATMENT

Elements that should be taken into account when assessing whether or not a particular treatment is cruel, inhumane or degrading should include the particular vulnerability of the victim as well as the his/her perception of the situation. The high level of mental harm and suffering is aggravated by its protracted nature and a prior condition of lawlessness, poverty and lack of health care due to the absence of domestic policies in Yemen to tackle these issues. At the root of all the symptoms highlighted in the study, the feeling of uncertainty concerning one’s own life, or that of a relative, is stemming directly from the fact that the complete absence of transparency and accountability in the way drones are used creates an atmosphere of constant fear of being targeted arbitrarily without understanding the reasons why and without the possibility to be heard before or after the strikes. The majority of the respondents show a strong feeling of incomprehension and frustration. For example, several girls surveyed asked the interviewer if their father or brother would also be killed by a drone thinking that the surveyor would be able to give them an answer.

We also believe that the legal black hole in which drone attacks are operating is at the source of the severe

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71 Alkarama Foundation contribution to the List of Issue prior to Reporting, CAT, Yemen op. cit.
72 The following arguments are based on perceptions of civilians. We thus recall that International and regional jurisprudence have been taking into account subjective elements related to the vulnerability of the victim, as well as the environment and the cumulative effect of various factors in order to assess the gravity of the pain and suffering. These elements may include inter alia the powerlessness of the victim, living conditions, or cultural elements. See: Report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment of punishment, UN Doc. E/CN.4/2006/6, para. 39.
mental suffering showed in the PTSD study. Civilian population living under drones feel that everyone can be a target, arbitrarily. The widespread presence of high levels of perpetual fear and anxiety should be considered as amounting to cruel, inhumane and degrading treatment. There has been recurring jurisprudence of the Human Rights Committee (hereinafter “HRC”) defining a certain level and seriousness of continuing uncertainty, anguish and mental distress as amounting to cruel and inhuman treatment. Mental distress is also clearly recognised by the HRC as an equally valid form of suffering as physical pain under Article 7.

Furthermore, the protracted character of drone operations constitutes an aggravated factor impeding any form of recovery. Drone operations have been ongoing in Yemen for the past 12 years and have been adding to the suffering of the civilians while perpetuating the hopelessness of never ending violence. A special attention should be given to children who grew up in this atmosphere of anxiety and paranoia of having their parents or other relatives killed, and who will probably be referred to in the future as the “drone generation”, who only know a world in which death can take their loved ones suddenly and without explanation. As explained above, almost all children show feelings of anger and symptoms of enuresis, insomnia, incomprehension and constant fear and lost interest in significant part of their lives like playing or going to school. In the case of families of victims, the protracted nature of the operations results in an impossibility to recover from the trauma caused by the loss of their relative since nearly all respondents in this situation told us that the sound of drones or aerial vehicles made them think about their loss and that it was impossible to forget and recover. We strongly believe that this aspect is also determined by the fact that the “war against terrorism” has never been limited either geographically or temporarily.

4.4.2 ABSENCE OF TRANSPARENCY AND ACCOUNTABILITY

The legal black hole around the use of drones is the root cause of an atmosphere of lawlessness and arbitrariness on the ground, and is leading to a profound and long-time psychological effect on civilian populations. The feeling of arbitrariness in the way their lives are treated is exacerbated by a complete lack of accountability. To date, no legal mechanism has been put in place in order to hear claims of families of victims and the U.S. has not yet proposed any kind of explanation, compensation or even apologies. Furthermore, no effective redress mechanism has been put in place by the U.S. or the Yemeni government. The impression of being treated in an inhumane way also flows from this absence of accountability and explanation as to why their relative was killed. This situation is more stigmatising socially because of the impossibility of the families to prove their relative’s innocence. Furthermore, it is noteworthy that, in most cases, the casualties are men, whose loss as breadwinners in large families has strong economic consequences in a context where poverty is rampant.

During the interviews that Alkarama conducted, frustration was common especially among women who were responding to our questions with anger. They showed scepticism about the usefulness of the study to help them. Families asked not only for accountability and compensation but also for respect and dignity through apologies or acknowledgement of their loss and suffering by the responsible authorities. The complete silence of both their own and the U.S.’ governments makes them believe that their suffering is
of no significance. For example, there were instances of women questioning the surveyor with anger as to what was the aim of the survey and questionnaire if no one wants to even hear their claims. This feeling of being abandoned is adding to the symptoms of sadness and depression that are rampant among children and adults alike.

We hence believe that the complete absence of accountability or even acknowledgement of the strikes or the casualties should be considered as violations of Articles 1076, 1177, 1278 and 1379 of the CAT. Furthermore, the lack of review by an independent authority or even the lack of congressional oversight of the drone operations amount, in our opinion, to a violation of the CAT that imposes information, oversight and review as ways to prevent the occurrence of torture and cruel, degrading and inhumane treatment.

4.5 PECULIARITY OF DRONE TECHNOLOGY

We are aware of the arguments that can be called upon to oppose our conclusions. It is often argued that PTSD among civilians is a “normal” reaction to a situation of conflict, or that drones are not different from long range missiles. However, we believe that drones have peculiar characteristics that make their use more prone to violations of both IHL and human rights law.

The Special Rapporteur on extrajudicial, summary or arbitrary executions stressed in a report that the obvious advantage of using armed drones is clear in dangerous theatres where, “they permit targeted killings at little to no risk to the State personnel carrying them out, and they can be operated remotely from the home State”80. It is hence important to understand that the peculiarities of armed drones and the advantages this technology offers to the country using it make arbitrary and unchecked policies easier to sustain. Coupled with the legal black hole in which they are being currently used, their peculiar characteristics have been able to cause severe harm to Yemeni civilians. To further stress this point, as there are no American lives at stake and the financial costs are not high for the U.S., the unregulated use of the drone technology has virtually invited recklessness in the use of force.

We are facing two aspects that are reinforcing each other: the policies create the perfect environment for the drones to be used and the drone technology is making the use of such policies possible. It is thus not surprising that the Special Rapporteur noted, “the greater concern with drones is that because they make it easier to kill without risk to a State’s forces, policy makers and commanders will be tempted to interpret

---

76 Article 10
1. Each State Party shall ensure that education and information regarding the prohibition against torture are fully included in the training of law enforcement personnel, civil or military, medical personnel, public officials and other persons who may be involved in the custody, interrogation or treatment of any individual subjected to any form of arrest, detention or imprisonment.
2. Each State Party shall include this prohibition in the rules or instructions issued in regard to the duties and functions of any such person.

77 Article 11
Each State Party shall keep under systematic review interrogation rules, instructions, methods and practices as well as arrangements for the custody and treatment of persons subjected to any form of arrest, detention or imprisonment in any territory under its jurisdiction, with a view to preventing any cases of torture.

78 Article 12
Each State Party shall ensure that its competent authorities proceed to a prompt and impartial investigation, wherever there is reasonable ground to believe that an act of torture has been committed in any territory under its jurisdiction.

79 Article 13
Each State Party shall ensure that any individual who alleges he has been subjected to torture in any territory under its jurisdiction has the right to complain to, and to have his case promptly and impartially examined by, its competent authorities. Steps shall be taken to ensure that the complainant and witnesses are protected against all ill-treatment or intimidation as a consequence of his complaint or any evidence given.

80 “Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Study on targeted killings”, para 27.
PECULIARITY OF DRONE TECHNOLOGY

the legal limitations on who can be killed, and under what circumstances, too expansively." 81

Some have nevertheless argued that the precision of drone strikes could actually strengthen the respect principle of discrimination between civilian and non-civilian targets. However, this argument does not stand up to scrutiny or close examination of the empirical findings this report has detailed from Yemen. Furthermore, numerous studies and investigations from Universities, NGOs and investigative journalists have also shown that civilians are being injured and killed by these so-called “targeted-killings”. Yet, civilian casualties are rarely acknowledged by the U.S. government, which qualifies quasi-systematically ex post facto the victims of strikes as “militants”.

What we are trying to present here goes even beyond the indiscriminate nature of drone attacks. It is a picture of the everyday lives of civilians directly affected by drones constantly hovering in their skies. We wish to remind our readers here of a thought shared by a civilian: drone attacks are “treacherous” as they make you fear the skies above you. In this sense, drones constitute a fracture in the distance put between the killer and the killed, via a screen that pushes the limits of dehumanisation of both sides.

A notable consequence of the simplicity with which deadly force can be used and its effects disregarded, is the considerable lowering of the threshold of the use of force from last resort to a simple costless enterprise that can be conducted safely from home. To put it in common metaphor, they are the “cancer-free cigarette” of the use of force. Drones can be operated from home, without endangering the lives of soldiers who conduct these attacks and hence also lower the political cost for the sending country. The temptation to use them makes the use of force politically less expensive, thereby changing the parameters of the political calculus that nations have to make before resorting to the use of force. The use of deadly force as a last resort paradigm, which has been the cornerstone of modern international law as well as human rights law, is thus directly jeopardised.

On the operational side, the U.S. is now able to carry out strikes in multiple theatres at the same time globally. This has been possible without the “normal political cost” that it would have had to account for with the executive branch, if it were to maintain half a dozen operations in low-level conflicts with high levels of losses for those on the ground. The core rationale of political and military action of States in the international sphere is based on an opportunity-cost calculation, while drones make the “cost” part of it financially, politically and in terms of army losses less problematic, and in fact serve to enable armed action abroad. However, if we take into consideration all the consequences that the use of drones entails for civilians – both in terms of right to life but also the psychological trauma of those who are constantly living under them – the bigger picture looks even more worrisome.

At this juncture, it is important to also engage with an ethical issue, namely, are we not all equal with regard to this peculiar form of military action? The drone technology has essentially set a relationship of omnipotence and vulnerability between the U.S. forces and the Yemeni civilians respectively. The feeling of abandonment and disregard for their dignity that many Yemeni expressed during the surveys is reflective of this power relationship that is sustained by the drone technology. Therefore, it is not only the way in which the technology is used but also the technology itself that is creating angst among Yemeni civilians. The most powerful actors who can carry out this kind of action, at a cheap political and financial cost, overuse it at the expense of those who are already vulnerable. Not only are the voices of the vulnerable not heard in the first place but are also further silenced by the violent political choices of the powerful actors. This imbalance and asymmetry of power is increasingly pushing people towards more violence, as both the only means of expression and of revenge. This consideration should also be taken into account seriously by U.S. law and policy makers as it entails that in practice the policy is counterproductive both in terms of U.S. national security and in terms of stability in the region by fuelling resent and violence on the long term.

81 Ibid, para 80
Lastly, the peculiarity of drone technology has been causing severe harm to civilians and hindering the enjoyment of their rights and freedom. On 22 September 2014, while opening the Human Rights Council’s panel discussion on the use remotely piloted aircraft or armed drones in counterterrorism and military operations, Flavia Pansieri, Deputy High Commissioner for Human Rights raised the issue of the effects of drone operations on civilian populations and focused on two main points: the psychological effects of it and the effect on the enjoyment of other basic rights and freedoms such as the right to peaceful assembly, the right to education or the right to health. Our findings have ascertained that the concerns of Mrs Pansieri are founded in the reality of the everyday lives of civilians living under drones. Participants of our study have clearly mentioned their fears of attending gatherings, even weddings, as they were afraid of “making too much noise during celebrations” that could potentially trigger a drone attack. After the killing of a teacher in Qawla, mothers have been afraid that the school might be targeted. This constant fear of being targeted so easily and so arbitrarily has crippled the daily lives of the people interviewed. It is important to relate the very nature of drone technology to these aspects as well; in particular, because the fear of the constant presence of drones in the skies that can kill any moment is sustained by a technology that is politically and financially cheap for the U.S., is unregulated, has been sucked into a legal black hole and creates an equation of power where the vulnerable are nothing but dots on a screen.

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83 Alkarama Foundation, Yemen/USA : when a drone strike turns a wedding into a tragedy, 03 January 2014, Op cit.
The fundamental rationale of political and military action of States in the international sphere is based on an opportunity-cost calculation. Drones make the “cost” part of it, be it financially, politically or in terms of loss of military personnel, minimal. However, simply because this particular form of military action does not entail significant “costs” for the intervening State, it does not imply that there is no “cost” at all, especially for those who are at the receiving end of such operations. Indeed, claims have often been made by intervening States that drones possess the quality of precision which reduce the impact of military actions on civilians. However, the unabated, uncontrolled and unaccountable drone operations have a severe impact on civilians, not only in terms of casualties but also in the context of spreading psychological trauma.

This study has shown that there is a heavy cost paid by the most vulnerable people living under drones in Yemen. These civilians, who are already grappling with extreme poverty and are exposed to insecurities from diverse armed groups, are being further traumatised from the skies by a much more powerful actor. The findings of this study are reflective of the severity of the costs that civilians have to forcibly cope with in their daily lives. An overwhelming majority of adult respondents are seen to be suffering from numerous drone-inflicted symptoms of PTSD, that are even more prevalent amongst children. The situation has transcended the question about whether or not an individual has lost a family member to a drone attack, simply because trauma has become pervasive in a society living constantly under the fear of drones. The most vulnerable people in the Yemeni society, namely women and children, are particularly at risk of suffering from severe psychological issues. When children start to fear going to school and worry about playing outside because drones might cause devastation, the growth of a psychologically healthy society that is capable of reducing existing conflicts is under serious jeopardy. Filled with anxiety, fear, depression, anger and frustration, both the young and old are craving for justice and some for revenge against those operating the drones. An entire generation living in a constant state of uncertainty and unpredictability, with no recourse to justice or redress, and marked by a sense of powerlessness to plan a secure future of respect and dignity, is being lost under traumatising skies. These immediate consequences of drone operations, especially if they are not addressed urgently, will most certainly contribute towards long-term social, political and economic instability in the region.

Furthermore, the asymmetry and inequality of power that marks the strength of U.S. drone operations around vulnerable civilians is but compounded by a complete absence of any administrative or judicial mechanisms, nationally or internationally, that can protect these civilians or provide them with any kind of redress. The legal implications of drone attacks, both in international and national legal frameworks, have been profound as drone attacks continue to proliferate with minimal regulation, transparency, accountability and retribution. A “legal black-hole” has engulfed all aspects of drone operations, while the Law of War and Human Rights Law are increasingly being overlooked. This most certainly is a failure of the international community in containing a weapon and process of warfare that has underhandedly been causing severe harm to civilian populations. Moreover, the very nature of drone technology and the peculiar landscape of warfare it invariably creates have not been engaged with adequately in legal and ethical contexts. It is here that a fundamental moral question needs to be asked; are we not equal with regard to this form of military action? A simple thought experiment can be of use in this context:

What if the geographical scope of the “war against terrorism”, which already knows no borders, were to be expanded from territories in South Asia and Middle East to incorporate the Western World – Europe and even the United States – where drone attacks would be conducted? What if the entire world was to fall within the “legal black-hole” that allows for the unabated operation of drones? What would the daily lives of people around the world look like if they were subjected to constant drone attacks to fight terrorism? This is a particularly worrying hypothetical scenario, but is nevertheless a reality for those living under the traumatising skies in Yemen.

We thus believe that it is of primary importance that people around the world are made aware of the
CONCLUSIONS AND RECOMMENDATIONS

practical consequences that already arise and will become more severe if the issues of accountability, transparency and retribution in the context of drone operations are not properly addressed by law and policy-makers. More than undermining the rule of law at domestic and international levels, the use of armed drones is a direct threat to the most fundamental rights of individuals across the world, including the right to life and the right to be free from inhuman, cruel and degrading treatment, as well as numerous others such as the rights to health, education and development.

Some might argue that PTSD is a “normal reaction” to a situation of any armed conflict. However, it is crucial to ask whether specific processes of warfare, which can be changed and regulated, are exacerbating a situation of uncertainty, violence and trauma. This is even more important for this peculiar form of warfare because it is repeatedly claimed that drones have a minimal impact on civilians, while all regulation or oversight is lost within secrecy and legal black holes. This study has empirically challenged the dominant U.S. narrative that drone attacks are precise and hence cause little harm to civilians. Most importantly, by sharing our findings, we have given an opportunity to the readers to put themselves in the shoes of the Yemeni civilians and to picture the constant presence of lethal drones above their lives. This has been done with a hope that the severity of the situation will penetrate the global political consciousness and the international community will urgently strive to stop the skies from increasingly becoming a source of trauma.

Recommendations for the U.S. government:

- We recommend to the U.S. government to publish and explain in full transparency its legal standards and institutional processes for conducting drone strikes and targeted killings and take into account due process of law guarantee for both U.S. and non U.S. nationals;
- Clarify its method of counting civilian casualties and explain why that method is consistent with IHL standards;
- Where factual disputes exist about the threat levels regarding past drone strikes, we request the U.S. government to release the relevant details and explain why a particular threat was considered as imminent triggering the right to self-defence;
- Clarify the condition used to assess the validity of express sovereign’s consent or the inability and unwillingness of those sovereigns to suppress a legitimate threat for all past, current and future operations;
- Engage with the ethical issues, the blowback and the negative consequences of the drone policy, including for the U.S.’ own interests, as the impact of drones on civilians has created strong feelings of resentment towards the U.S. and its allies in the region;
- Introduce institutional mechanisms which allows full accountability and retribution for violations associated with the use of drone;
- Acknowledge the consequence of this policy on affected populations and provide full reparation and apologies to these people;
- Assist in providing psychological care to those suffering from trauma due to drone operations through technical and financial assistance;
- Stop drone attacks in Yemen and in all other territories and favor alternative means to counter terrorism by putting at the core of its policy respect for the rights and dignity of people affected by both terrorism and counter-terrorism.
Recommendations for the Yemeni government:

- We request the Yemeni government to demand an immediate end to drone strikes within its territories and to hold itself accountable for violations committed with its consent to its population;
- To ensure that civilians affected by drone strikes directly or indirectly have provisions for redress within the domestic system;
- To ensure that the rights of the civilians are protected in regions where drones are operated;
- To address the psychological consequences of drone operations and push the U.S. government to implement the recommendations mentioned above.

Recommendations for the international community:

- We request that the debate on legal and ethical issues raised by the use of drones takes a centre stage and receives more attention;
- That more pressure be placed on the U.S. government as well as other States to revise the policies and practices surrounding drone strikes;
- That international mechanisms for regulating and making drone strikes accountable be discussed and developed at the earliest within the United Nations Human Rights Mechanisms;
- That greater attention be placed on aspects of psychological impacts and loss of life due to drone strikes among civilians.
Annex A: Screening for Post-Traumatic Stress Disorder for adults respondents
Annex B: Screening for Post-Traumatic Stress Disorder for children respondents
Annex C: Graphs – Overall results for main questions
ANNEX A : SCREENING FOR PTSD FOR ADULTS RESPONDENTS

Screening for Posttraumatic Stress Disorder (PTSD)

Questionnaire for adults

Note for surveyor:

You have to explain to the surveyed what a drone is and assess her/his understanding of a drone; distinguish it from other aerial attacks. Please take pictures and video recordings if possible, with the approval of the surveyed and précising that no one’s name will be shared with any other organisation without their prior approval.

Make sure you have parent’s approval to interview children under the age of 18.

Please answer these questions as accurately as possible.

Out of 100 people surveyed you have to make sure that you have equal number of men and women, and equal number of people from different ages.

Personal Background questions:

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence</td>
</tr>
<tr>
<td>Question 1 : Are you</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Question 2 : Age range</td>
</tr>
<tr>
<td>10-14</td>
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<tr>
<td>15-24</td>
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<tr>
<td>25-40</td>
</tr>
<tr>
<td>40-55</td>
</tr>
<tr>
<td>55+</td>
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<tr>
<td>Question 3: Are you married?</td>
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<tr>
<td>Yes</td>
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<tr>
<td>No</td>
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<tr>
<td>Question 4: Number of dependents (parents included if applicable)</td>
</tr>
<tr>
<td>Question 5: Occupation</td>
</tr>
</tbody>
</table>

Drone related background questions:

<table>
<thead>
<tr>
<th>Question 6: Do you understand what a drone is?</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Question 7: Are you aware of drones operating in your region?</td>
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<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Question 8: Have you witnessed or are aware of aerial bombing that you believe is from a drone?</td>
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<tr>
<td>Question 9: Are you afraid that a drone attack might harm you, or your family, or your community?</td>
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<tr>
<td>Question 10: Have you ever lost any immediate family member from such an attack?</td>
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<tr>
<td>Question 11: Do you have any immediate family member who has been severely injured by such an attack?</td>
</tr>
</tbody>
</table>

**PTSD Screening in the context of drones**

Are you troubled by the following?

| Question 12: You have experienced or witnessed a life-threatening event that caused intense fear, helplessness, or horror that is liked to drone activities | Yes | No |

Do you re-experience the event in at least one of the following ways?

| Question 13: Repeated, distressing memories, or dreams | Yes | No |
| Question 14: Acting or feeling as if the event were happening again (flashbacks or a sense of reliving it) | Yes | No |
| Question 14 Intense physical and/or emotional distress when you are exposed to things that remind you of the event | Yes | No |

Do reminders of the event affect you in at least three of the following ways?

| Question 16: Avoiding thoughts, feelings, or conversations about it | Yes | No |
## Annex A: Screening for PTSD for Adults Respondents

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 17: Avoiding activities and places or people who remind you of it</td>
<td></td>
<td></td>
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<tr>
<td>Question 18: Blanking on important parts of it</td>
<td></td>
<td></td>
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<tr>
<td>Question 19: Losing interest in significant activities of your life</td>
<td></td>
<td></td>
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<tr>
<td>Question 20: Feeling your range of emotions is restricted</td>
<td></td>
<td></td>
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<tr>
<td>Question 21: Sensing that your future has shrunk (for example, you don’t expect to have a career, marriage, children, or normal life span)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you troubled by at least two of the following?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 22: Problems sleeping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 23: Irritability or outbursts of anger</td>
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<td></td>
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<tr>
<td>Question 24: Problems concentrating</td>
<td></td>
<td></td>
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<tr>
<td>Question 25: Feeling “on guard” (Being “super alert” or watchful on)</td>
<td></td>
<td></td>
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<tr>
<td>Question 26: An exaggerated startle response</td>
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</tbody>
</table>

Having more than one illness at the same time can make it difficult to diagnose and treat the different conditions. Depression and substance abuse are among the conditions that occasionally complicate PTSD and other anxiety disorders.

| Question 27: Have you experienced changes in sleeping or eating habits? |     |    |
| More days than not, do you feel...                                     |     |    |
| Question 28: sad or depressed?                                         |     |    |
### ANNEX A : SCREENING FOR PTSD FOR ADULTS RESPONDENTS

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 29: disinterested in life?</td>
<td></td>
<td></td>
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<tr>
<td>Question 30: worthless or guilty?</td>
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<tr>
<td>During the last year, has the use of alcohol, drugs or nicotine, Khat/qat...</td>
<td></td>
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<tr>
<td>Question 31: resulted in your failure to fulfill responsibilities with work, school, or family?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Question 32: placed you in a dangerous situation, such as driving or riding under the influence?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Question 33: gotten you arrested?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Question 34 continued despite causing problems for you or your loved ones?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>


**Comments of the surveyor**

Please also assess the surveyed’s link between his PTSD and drones attacks based on your personal interaction.
Screening for Posttraumatic Stress Disorder (PTSD)
Questionnaire for children

**Personal Background questions:**

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence</td>
<td></td>
</tr>
<tr>
<td>Are you</td>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Name of the father</td>
<td></td>
</tr>
<tr>
<td>Name of the mother</td>
<td></td>
</tr>
</tbody>
</table>

**Drone related background questions:**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1: Do you understand what a drone is?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 2: Are you aware of drones operating in your region?</td>
<td></td>
<td></td>
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<tr>
<td>Question 3: Have you witnessed or are aware of aerial bombing that you believe is from a drone?</td>
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<td>Question 5: Have you ever lost any immediate family member from such an attack?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 6: Do you have any immediate family member who has been severely injured by such an attack?</td>
<td></td>
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</tr>
</tbody>
</table>
## PTSD Screening in the context of drones

**Tell us what are the problems that are bothering you**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 7: Having upsetting thoughts or images about the event that came into your head when you didn’t want them to</td>
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<td>Question 8: Having bad dreams or nightmares</td>
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<td>Question 9: Acting or feeling as if the event was happening again (hearing something or seeing a picture about it and feeling as if I am there again)</td>
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<td>Question 10: Feeling upset when you think about it or hear about the event (for example, feeling scared, angry, sad, guilty, etc)</td>
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<td>Question 11: Having feelings in your body when you think about or hear about the event (for example, breaking out into a sweat, heart beating fast)</td>
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<td>Question 12: Trying not to think about, talk about, or have feelings about the event</td>
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<td>Question 13: Trying to avoid activities, people, or places that remind you of the traumatic event</td>
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<td>Question 14: Not being able to remember an important part of the upsetting event</td>
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<td>Question 15: Having much less interest in doing things you used to do</td>
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<td>Question 16: Not feeling close to people around you</td>
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<td>Question 17: Not being able to have strong feelings (for example, being unable to cry or unable to feel happy)</td>
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<td>Question 18: Feeling as if your future plans or hopes will not come true (for example, you will not have a job or getting married or having kids)</td>
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<td>Question 19: Having trouble falling or staying asleep</td>
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<td>Question 20: Feeling irritable or having fits of anger</td>
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## ANNEX B: SCREENING FOR PTSD FOR CHILDREN RESPONDENTS

| Question 21: Having trouble concentrating (for example, losing track of a story on the television, forgetting what you read, not paying attention in class) |
| Question 22: Being jumpy or easily startled (for example, when someone walks up behind you) |

Indicate below if the problems you rated in Part 1 have gotten in the way with any of the following areas of your life DURING THE PAST 2 WEEKS.

- Question 23: Doing your prayers
- Question 24: Chores and duties at home
- Question 25: Relationships with friends
- Question 26: Fun and hobby activities
- Question 27: Schoolwork
- Question 28: Relationships with your family
- Question 29: General happiness with your life


**Comments of the surveyor**

Please also assess the surveyed's link between his PTSD and drones attacks based on your personal interaction.
ANNEX C: GRAPHS – YES % RESULTS FOR EACH QUESTION

Chart 1: Repeated, distressing memories, or dreams

- Adult:
  - Female Non-victim: 97%
  - Female Victim: 95%
  - Male Non-Victim: 94%
  - Male Victim: 100%

- Child:
  - Female Non-victim: 78%
  - Female Victim: 50%
  - Male Non-Victim: 38%
  - Male Victim: 83%

Chart 2: Acting or feeling as if the event were happening again

- Adult:
  - Female Non-victim: 97%
  - Female Victim: 100%
  - Male Non-Victim: 81%
  - Male Victim: 92%

- Child:
  - Female Non-victim: 89%
  - Female Victim: 75%
  - Male Non-Victim: 58%
  - Male Victim: 62%

Chart 3: Intense distress when exposed to things reminding the event

- Adult:
  - Female Non-victim: 86%
  - Female Victim: 81%
  - Male Non-Victim: 53%
  - Male Victim: 88%

- Child:
  - Female Non-victim: 100%
  - Female Victim: 100%
  - Male Non-Victim: 88%
  - Male Victim: 100%

Chart 4: Avoiding thoughts, feelings, or conversations about it

- Adult:
  - Female Non-victim: 83%
  - Female Victim: 62%
  - Male Non-Victim: 41%
  - Male Victim: 55%

- Child:
  - Female Non-victim: 100%
  - Female Victim: 89%
  - Male Non-Victim: 25%
  - Male Victim: 83%
ANNEX C : GRAPHS – YES % RESULTS FOR EACH QUESTION

Chart 5  Avoiding activities and places or people who remind you of it

Chart 6  Losing interest in significant activities of your life

Chart 7  Feeling your range of emotions is restricted

Chart 8  Sensing that your future has shrunk
ANNEX C: GRAPHS – YES % RESULTS FOR EACH QUESTION

**Chart 9**  
Problems sleeping

**Chart 10**  
Irritability or outbursts of anger

**Chart 11**  
Problems concentrating

**Chart 12**  
Being easily startled
Help us support all those whose rights to life, liberty and physical and moral integrity are threatened

**VIA BANK TRANSFER**

**NAME OF BANK** Banque Raiffeisen, CH-1242 Satigny  
**NAME** Fondation Alkarama  
**SWIFT** RAIFCH22  
**IBAN** CH73 8021 0000 0063 5406 0

**VIA INTERNET**

Please visit [EN.ALKARAMA.ORG/DONATE](http://EN.ALKARAMA.ORG/DONATE) to donate via PayPal
Between July and September 2014, Alkarama conducted a survey to assess the psychological trauma of civilians in two Yemeni villages where drone operations are carried out by the United States. The study aims at evaluating the prevalence of Post-Traumatic Stress Disorder (PTSD) symptoms resulting from these drone operations. After screening over 100 individuals, women and men, girls and boys, we found strong common patterns of anxiety, stress, paranoia, insomnia and other trauma symptoms across gender and age.

At the root cause of this trauma is a dangerous policy, which disregards and violates fundamental legal safeguards without any oversight or accountability, and a treacherous weapon, which allows by its low political cost this arbitrary violence.

With this report, we aim to reduce the gap between the abstraction of a screen behind which a drone strike is triggered and the overwhelming, constant mental suffering of civilians finding themselves in these drones’ playground. This study testifies to an injustice between, on one side, a powerful U.S. executive empowered by the absence of oversight and accountability and, on the other, traumatised vulnerable people already grappling with extreme poverty and insecurity.

This study empirically challenges the dominant U.S. narrative according to which drone attacks are “surgical” and hence cause little harm to civilians. By sharing our findings, we want our readers to put themselves in the shoes of Yemeni civilians and picture what it means to live under drones. Hoping that the severity of the situation will penetrate the global political consciousness, we call upon the U.S. and the international community to act urgently; and to act so that these powerless populations can secure a future of respect and dignity and not be forgotten under their traumatising skies.