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Health Care Under Fire: The New Normal?

10 March 2017

Background of consultancy report: This research and report was compiled for Chatham House by a research team at the London School of Economics and Political Science (LSE). The project received support from partnership[1] with Médecins Sans Frontières (MSF) and the International Committee of the Red Cross (ICRC). The report fulfils the requirements of the Humanitarian Consultancy Project for the MSc in International Development and Humanitarian Emergencies.

[1] Partnership in this case refers to specific extended, continued collaboration and engagement from the outset to completion of the project.
[2] Copyright front cover photo: AFP Photo / Said Khatib.

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ACKNOWLEDGEMENTS

The research team would like to thank Dr. Stuart Gordon (Chatham House and LSE) for his direction and support. Additionally, Lt. General Louis Lillywhite and Rachel Thompson (Chatham House), Sarah Cotton (ICRC), Andre Heller Perache and Olivia Blanchard (MSF) for their invaluable guidance, knowledge and expertise and Nazaneen Nikpour Hernandez (Chatham House) for research contributions, feedback and continuous support.

Additionally, we would like to express appreciation from an extensive group, especially the valuable insights and feedback from key informants and seminar participants: Christian Captier (MSF), Dana Moss (Physicians for Human Rights Israel), Diederik Lohman (Human Rights Watch), Emma Diggle (Save the Children), Emma Winberg (Mayday Rescue), Erin Kenney (World Health Organisation), Hussam Wafa Issa (Physicians for Human Rights Israel), James Le Mesurier (Mayday Rescue), Jo Kuper (MSF), Leonard Rubenstein (Safeguarding Health in Conflict Coalition), Preeti Patel (King's College London), and Dr. Sherin Varkey (UNICEF). We would also like to show our gratitude to the LSE staff, including: Regina Enjuto-Martinez, Rochelle Burgess, Shani Orgad, Lilie Chouliaraki, Anna MacDonald, Heather Dawson, Andra Fry and Nedelin Velikov for guidance and support received for the methodology and research. Finally, we thank Melanie Thienard (LSE) for assistance in the rapid review.

ACRONYMS

AHCC Attacks on healthcare in conflict
HCiD Healthcare in Danger (ICRC project)
ICRC The International Committee of the Red Cross and Red Crescent
IHL International Humanitarian Law
MCUF Medical Care Under Fire (MSF project)
MSF Médecins Sans Frontières
PHRI Physicians for Human Rights Israel
SHCC Safeguarding Health in Conflict Coalition
UN United Nations
WHA World Health Assembly
WHO World Health Organisation

GLOSSARY

Attacks on healthcare in conflict (AHCC): 'any act of verbal or physical violence or obstruction or threat of violence that interferes with the availability, access and delivery of curative and/or preventive health services during emergencies'.[2]

Healthcare: followed the ICRC's definition as 'prevention, diagnosis, treatment or control of diseases, injuries or disabilities, as well as measures to safeguard the health of mothers and young children. The term encompasses all activities that provide support or ensure access for the wounded and sick to these health-care services, including searching for, collecting or transporting the wounded and sick, or the management of health-care facilities'.[3]

Violence: was understood according to the WHO definition as 'intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation'.[4]

2 WHO, *Attacks on Health Care Prevent. Protect. Provide - Report on Attacks on Health Care in Emergencies.* (Geneva: WHO, 2016: 2).
3 ICRC, *Health Care in Danger - January 2012 to December 2014* (Geneva: ICRC, 2015:4).
4 WHO, "Definition and typology of violence." *WHO*. 2017. http://www.who.int/violenceprevention/approach/definition/en/ (Accessed 12.02.2017).

EXECUTIVE SUMMARY

The purpose of this report is to identify, examine, and assess the evidence base for attacks on healthcare in conflict (AHCC). In light of this, a rapid review of existing data, documentation, and research of AHCC since 2011 was undertaken. The aim of the analysis is to identify strengths, weaknesses, and potential consequences of the evidence base to inform future policy, research and action on AHCC. This report adopts a comprehensive definition of AHCC, including verbal and physical violence, threats, and obstruction that interfere with access or delivery of preventative and curative healthcare in conflict contexts.[5] AHCC is a violation of International Humanitarian Law and the right to health[6]. While violence against healthcare occurs in both war and peacetime, particular attention has been drawn to AHCC.

Over the past five years, AHCC has received increasing attention in global public space from humanitarian actors, media, policy-makers, and academics. This has successfully put AHCC on the international agenda, resulting in increased global governance efforts and international research and advocacy campaigns.

Despite successfully generating increased attention and denouncing AHCC, little examination has been given to the evidence base. This evidence base informs the dominant discourse that dictates action and knowledge on the issue. In addition to assessing strengths and weaknesses of this evidence base, the potential for unintended consequences created by the discourse and attention deserves examination. In particular, this evaluation is concerned with the quality and utility of the evidence base for further research, policy, and practice seeking to respond to and address AHCC.

The researchers implemented a three-part methodology. First, a rapid review provided a systematic and replicable study of data, documentation, and research on AHCC from six databases across several disciplines: academic, media/press, and humanitarian grey literature. A peer review was conducted to ensure additional key sources were identified and included. A rigorous search process produced an optimal number of documents that fulfilled the inclusion criteria. In all, 131 documents were analysed, plus six additional data collection systems. Second, eight expert interviews and a multidisciplinary seminar were convened to corroborate and expand analytical findings and ensure that they were valuable for a wide range of stakeholders. Third, a literature review of discourse theories, humanitarian communications, and conflict dynamics provided a conceptual framework to guide analysis and theorising.

[5] To include a variety of specific contexts which might shape the nature of attacks on healthcare, the research term included in the term conflict countries experiencing 'armed conflict' as well as 'other forms of collective violence', ICRC, *In Danger*, 4.
[6] Article 25 of the Universal Declaration of Human Rights and the World Health Organisation Constitution.

Combined, these methods were used to evaluate the evidence base according to:

- The rigour, validity, and quality of methodologies, data collection, and analysis employed
- The extent to which documents can be combined and used to corroborate further policy and academic research
- Emergent analytical themes and the use of theorising around patterns, trends, and motivations.

SIGNIFICANT FINDINGS

- The evidence base is predominantly influenced by data from a limited group of international organisations. This creates a restricted, non-representative evidence base, which is adapted and manipulated by a variety of actors.
- Data is removed from its context and initial purpose, resulting in generalisations that support the predominant discourse, creating perceived global trends that may not corroborate with reality.
- A persisting lack of standardised and comprehensive classifications allows the conception of AHCC to be narrowed, excluding other pervasive forms of violence or obstructions against healthcare from consideration. The privileging of particular forms and locations of attacks in AHCC discourse can create a sense of exceptionalism, making other settings and forms of violence invalid.
- A lack of common and combinable methodologies for collecting data hinders amassing an optimal global evidence base and undermines on-going research, analysis and theorising efforts.
- The concentration on generating visibility around AHCC has created an attention economy that promotes a self-reinforcing discourse. This is not synonymous with greater understanding. Instead, increased attention may produce unintended consequences, as a result of a discourse derived from weak and insufficient evidence.

Ultimately, the research found that despite an increase in attention paid to AHCC, there is a weak overall evidence base. Despite its weaknesses, this evidence base is used to support the predominant discourse that does not reflect the complex and diverse realities of AHCC. Although there has been general acknowledgement of the need for more systematic, harmonised data collection and standard classifications, these challenges persist. This research points to the conclusion that, in addition to improved data collection, greater multidisciplinary, contextualised analysis and theorising is a priority to advance understanding and effective responses to AHCC.

RECOMMENDATIONS

The report concludes with a set of recommendations for Chatham House aimed at promoting strengths, addressing weaknesses, and further investigating the potential of unintended consequences identified by this research. Specifically, the report recommends:

- Support the WHO to institutionalise systematic and comprehensive standards for data collection on AHCC. In addition, encourage the WHO to use their convening power to increase cooperation within the health-security network to harmonise and enable comparison across a breadth of perspectives.
- Promote the establishment of regionalised research consortiums to facilitate multidisciplinary collaboration and enable contextualised exploration and analysis of trends, patterns, and motivations in AHCC, which can support optimal responses and policy prescriptions.
- Include AHCC in Chatham House's promotion of global health security as a featured issue at the Munich Security Conference and MSC Core Group Meetings.
- Support objective enquiries to explore barriers to achieving and compliance with UNSCR 2286 by the United Kingdom.

1 INTRODUCTION

Despite an acknowledged underreporting of attacks on healthcare in conflict (AHCC)[7], the issue has gained increasing prominence since 2011. Multiple stakeholders, including humanitarian practitioners, academics, policy-makers, and the media have increased visibility and produced a dominant discourse that denounces AHCC and demands greater action. This attention resulted in several global governance efforts: World Health Assembly (WHA) Resolution 65.20, WHA Resolution 67.15; United Nations (UN) General Assembly Resolution (A/69/L.35), UN Security Council Resolution (UNSCR) 2286, and 2016 World Humanitarian Summit (WHS)[8] recommitment. In addition, several international research and advocacy campaigns have been launched: Medical Care Under Fire (MCUF) by Médecins Sans Frontières (MSF), Healthcare in Danger (HCiD) by the International Committee of the Red Cross and Red Crescent (ICRC), and the Safeguarding Health in Conflict Coalition (SHCC).

However, beyond consensus on the brutality of AHCC, less consideration has been given to potential unintended consequences resulting from increased international attention that draws on the current evidence base. Does the global attention on AHCC mobilise the right stakeholders and discussions to better understand and address these attacks, or does it produce unexpected consequences, such as overshadowing other atrocities on civilian spaces? The dominant AHCC discourse requires critical examination. This report addresses these concerns by examining *to what extent the existing evidence base on attacks on healthcare and medical neutrality can be combined, validated, and used to corroborate further academic and policy oriented research*. The research is concerned with both the strengths and weaknesses of the evidence base and its utility for informing practice, policy, and research on AHCC.

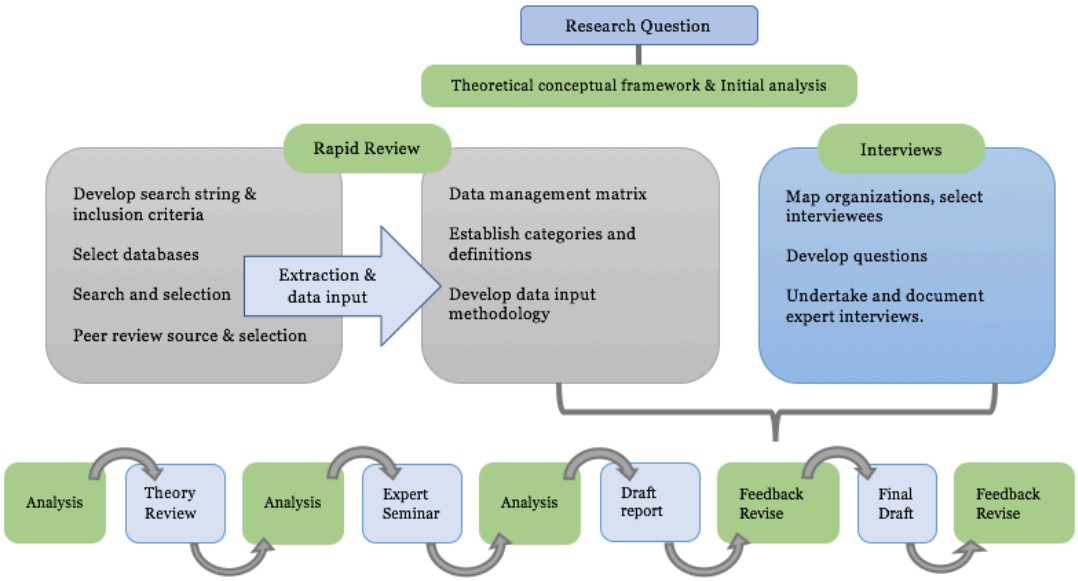
The World Health Organization (WHO) defines AHCC as 'any act of verbal or physical violence or obstruction or threat of violence that interferes with the availability, access and delivery of curative and/or preventive health services during emergencies'.[9] AHCC are a violation of International Humanitarian Law (IHL) and right to health obligations (WHO Constitution and Universal Declaration of Human Rights).[10] While this report focuses specifically on incidents

[7] SHCC. *No Protection, No Respect: Health Workers and Health Facilities Under Attack 2015 and Early 2016*, (Washington, D.C.; SHCC, 2016); WHO, *Attacks on Health Care*.
[8] WHO, "65th World Health Assembly closes with new global health measures." *WHO*. 2012. http://www.who.int/mediacentre/news/releases/2012/wha65_closes_20120526/en/ (Accessed Feb 12, 2017); WHO, "67th World Health Assembly adopts resolution on addressing violence." *WHO*. 2014. http://www.who.int/violence_injury_prevention/media/news/2014/24_05/en/ (Accessed Feb 12, 2017); UN, "GA Resolution (A/69/L.35; 2014)." *UN*. 2014. http://www.un.org/en/ga/69/resolutions.shtml (Accessed Feb 12, 2017); UNSC, *Security Council Resolution 2286 [on Protection of the Wounded and Sick, Medical Personnel and Humanitarian Personnel in Armed Conflict] S/RES/2286*. New York. UN. 2016; WHS, "World Humanitarian Summit." 2016. https://www.worldhumanitariansummit.org (Accessed Feb 12, 2017).
[9] WHO, *Attacks on Health Care*, 2.
[10] World Medical Association (WMA). *Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health (Right to Health)*, (WMA; 2017).

that occurred in conflict,[11] it acknowledges the routine level of violence against healthcare workers in both war and peacetime contexts.

The report uses mixed method research to interrogate the existing evidence base on AHCC and how it has been taken up by the dominant discourse, while theorising around unintended consequences. The following section (2) outlines the methodology and conceptual framework. Then, sections 3-6 analyse findings from the evidence base, according to: (3) production and use; (4) strengths; (5) weaknesses; and (6) unintended consequences. The report concludes with recommendations for Chatham House to progress policy and academic oriented research.

2 METHODOLOGY



Methodology Flow Chart 1.

The researchers employed a mixed method approach that combined three research methods chosen in collaboration with the clients (see Appendix 1). First, a rapid review of the AHCC evidence base, including a peer-review, was implemented. Second, expert interviews and a seminar provided a multi-disciplinary range of experienced perspectives, critique, and feedback. Third, a literature review of relevant social science theories guided deeper analysis and theorising. Ultimately, the research provided a rigorous assessment of the evidence base and a foundation for further analytical engagement and theorising on AHCC.

[11] The research takes a broad definition of 'conflict', situations where armed conflict, occupation, or political violence obstruct access to or delivery of healthcare.

2.1 RAPID REVIEW

A rapid review was chosen as a rigorous and replicable strategy that is established in the health policy and social science fields.[12] The review enabled a systematic extraction, assemblage, and analysis of existing evidence across four disciplines - social sciences, media, medical/health, and humanitarian.[13]

A search strategy was developed to provide optimal results across six databases, selected by credibility and relevance across the four disciplines. The inclusion criteria (Appendix 2) ensured pertinence in data extraction and analysis. The database search produced 4,859 hits of which 318 met the inclusion criteria, from which 131 were included after further filtering (see Appendix 3). To ensure key documents[14] were captured, the research also used a peer-led review by MSF, ICRC and Chatham House, which produced 48 documents, of which 21 were new.[15]

2.1.1 CATEGORISATION AND ANALYSIS

The rapid review focused on two core concepts: attacks on healthcare in conflict and medical neutrality in conflict. Broad definitions (including synonyms) for the core concepts ensured wide results that allowed for definitional comparisons between documents. The documents were assessed and analysed based on:

Validity: defined as a 'contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects'.[16] The research judged both internal and external validity of documents. Internal validity was established through the consideration of additional factors (such as conflict analysis) and the rigour of its methodology. External validity was established through the extent to which data and findings could be compared and replicated across multiple contexts.

Rigour: defined as 'systematic and self-conscious research design, data collection, interpretation, and communication' that includes clear documentation to allow for replication and 'plausible and coherent explanation of the phenomenon under scrutiny'.[17]

Compatibility: defined as the ability for two or more documents to be combined without conflicting claims, statements, facts, or statistics. This was addressed through comparisons of

[12] Holger J. Schünemann and Lorenzo Moja, "Reviews: Rapid! Rapid! Rapid! …and Systematic;" *Systematic Reviews Journal* 4, no. 4 (2015).
[13] Khangura, Sara, Kristin Konnyu, Rob Cushman, Jeremy Grimshaw and David Moher. "Evidence Summaries: The Evolution of a Rapid Review Approach." *Systematic Reviews* 1, no. 10 (2012).
[14] The report refers to the range of documents in the rapid review as 'documents.' Where relevant more details are given. Full list in Appendix 4.
[15] All documents obtained by peer-led review were considered within inclusion criteria and included in analysis.
[16] Glyn Winter, "A Comparative Discussion of the Notion of Validity in Qualitative and Quantitative Research." *The Qualitative Report* 4, no. 3 (2000: 1).
[17] Nicholas Mays and Catherine Pope. "Rigour and qualitative research." *British Medical Journal (BMJ)* 311 (1995: 110); Rosaline, S Barbour, "Checklists for Improving Rigour in Qualitative Research: A Case of the Tail Wagging the Dog?" *BMJ,* 322 (2001):

methodology, secondary sources, and definitions.

Quality: established by having been through a process of rigorous and systematic analysis and documentation.

Theorising: was judged based on the depth and volume of analysis, the application of a theoretical framework, and the author's willingness to go beyond description and engage in analytical theorising on drivers and causal relationships of AHCC.

A 30-category database (Appendix 5) was developed for analysis, which enabled a quantitative and qualitative examination of the evidence base (relating to *claims, epistemology, methodology* and *theorising*). The quantitative analysis ensured that measurable, common categories were applied to documents to capture varying perspectives.[18] The qualitative analysis enabled greater depth of examination and theorising around particular arrangements and tendencies in the evidence base.

2.2 EXPERT INTERVIEWS AND SEMINAR

Expert interviews and the seminar were used to collect cross-sectoral feedback and to identify priorities for further research. Eight interviews, selected for their expertise and experience in humanitarian healthcare were conducted. The interviews were also used to supplement the review by targeting underrepresented organisational perspectives, such as field officers from human rights organisations and UN (WHO) (see Appendix 6). Interviews were analysed separately and then collectively before being incorporated into the review database to test the credibility of initial findings and emerging patterns.

A multidisciplinary seminar was conducted to provide an expert forum to validate and critique initial findings and help mitigate potential research bias. Participants were selected to represent a range of perspectives across the humanitarian, public health, and conflict sector from INGOs, universities and think tanks.[19] Seminar critique was incorporated into the analysis and additional feedback was gathered on two draft reports to prioritise and ensure utility of research for the clients (see Appendix 12).

2.3 CONCEPTUAL FRAMEWORK

Analysis of the empirical evidence focuses on investigating dynamics that influence the quality of the evidence base, including how documents interpret and represent data to produce claims about trends and motivations. Recognising that documents captured in the rapid review combine different methodologies, epistemological perspectives, and objectives it is important to interrogate how this influences the evidence base. Weissman confirms the importance of

[18] Winter, *Comparative Discussion*
[19] See Appendix 7 for details of participants and agenda.

examining agendas by illustrating how studies on violence against humanitarian aid workers often use quantitative data in a way that confirms the preconceptions and agenda of the researchers.[20] Our analysis combines discourse analysis and humanitarian communications theories to conceptualise how documents interact to create the predominant discourse on AHCC.

While acknowledging the material reality of AHCC, this report argues that attacks gain meaning and become objects of knowledge[21] through discourse. Here, discourse is understood as a system of representation that consists of language and practices that 'systematically form the objects of which they speak'[22] by producing knowledge and meaning about a certain topic at a particular historical moment.[23] The production of knowledge is intimately implicated with power, which enables particular actors and statements to acquire *authority* and be accepted as *truth*.[24] Rather than being understood as fixed, discourses transform and take-off at particular moments when politics allow different statements to be accepted as *truth*.[25]

The conception of an issue - such as AHCC - is produced by the combination of discourse, knowledge, and power that determines how it is represented. The AHCC discourse creates a degree of stability and dominance by merging different disciplines - humanitarian, political, medical, and media discourses - to establish a hegemonic representation that upholds preconceptions and fits an emergency imaginary.[26] This emergency imaginary reduces the complexity of AHCC by setting parameters that draw on ideals and expectations of what is deemed an attack. By framing AHCC in a simplistic yet exceptional manner that demands an urgent response, the imaginary helps the AHCC discourse find resonance in the media and global policy space. In examining the operation of the AHCC discourse, we follow Hall in analysing six constitutive elements of the discourse.[27]

First, *rules* prescribe a certain way of discussing and thinking about AHCC, which governs how attacks are described and understood in a particular moment. Second, statements about AHCC help translate broad, abstract concepts into oversimplified accounts that use quantification and bold claims to attract attention and produce a particular kind of knowledge. Third, the discourse creates *subjects* (attacks) that embody and reinforce the discourse, by epitomising an

[20] Fabrice Weissman, "Violence Against Aid Workers: The Meaning of Measuring." In *Saving Lives and Staying Alive: Humanitarian Security in the Age of Risk Management*, edited by Michaël Neuman and Fabrice Weissman (London: Hurst & Company, 2016).
[21] The term 'knowledge' is used critically, recognising the power and authority required to produce statements accepted as truth/knowledge.
[22] Michel Foucault, *The Archaeology of Knowledge and the Discourse on Language*, (New York: Pantheon Books, 1972:49).
[23] Stuart Hall, "Foucault: Power, Knowledge and Discourse." In *Discourse Theory and Practice: A Reader,* edited by Margaret Wetherell, Stephanie Taylor and Simeon Yates, (London: Sage Publications, 2001).
[24] Michel Foucault, *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan, (London: Penguin Books Ltd., 1977); Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*. Translated by Colin Gordon, et al. (London: Harvester Wheatsheaf, 1980).
[25] Foucault, *Power*.
[26] Craig Calhoun, "The Idea of Emergency: Humanitarian Action and Global (Dis)order." In *Contemporary States of Emergency: The Politics of Military and Humanitarian Interventions,* edited by Didier Fassin and Mariella Pandolfi, (Cambridge, MA: MIT Press, 2010).
[27] Hall, *Foucault*.

image that fits the knowledge constituted by the statements. Despite acknowledging the potential breadth of forms of AHCC, the attacks that receive attention in the discourse fit within parameters set by the emergency imaginary.

Fourth, the discourse acquires *authority* through the production of knowledge that constitutes the *truth* about the issue at a particular historical moment.[28] In the AHCC discourse *authority* is linked to specific organisations and campaigns that quantify attacks and influence policy makers and media.[29] Fifth, the discourse prescribes a set of practices for addressing, managing, and preventing AHCC in a regulated manner that fits with the constituted knowledge. These practices include making statements and claims that mobilise attention and conform to the emergency imaginary. Last, it is acknowledged that different discourses will arise over time, leading to new conceptions of and responses to AHCC. This potential for change provides an opportunity for organisations like MSF and ICRC to expand the dialogue and include a broader range of voices in their projects on AHCC.[30] However, this adaptability also means that discourses can be interpreted and put to work by different actors or agendas. Thus, beyond its intended aims, the success of the AHCC discourse also creates a potential for unintended consequences. This conceptual framework guides our analysis through the rest of the report.

2.4 LIMITATIONS

- The research team acknowledges the role their positionality (including background, culture, and language bias) played in shaping their perspective of the research topic, analysis, and conclusions.
- Despite searching across four languages, use of English language search strings limited the results and only English documents were included in the analysis.
- Rapid reviews are susceptible to bias through the selection of databases and inclusion criteria.[31] This bias can privilege dominant perspectives within a field, thus upholding existing gatekeepers of an evidence base.
- For clarity, the report uses the term *global* discourse. However, the researchers recognise the western influence and bias that results from documents originating from Anglo-European authors and organisations. Thus, the AHCC discourse analysed in this report cannot be assumed to be representative of a global discourse.
- The researchers understand that semi-structured interviews can inadvertently represent topics or wording divergently, and different meanings may be drawn by interviewees. Furthermore, having three separate interviewers made cross-comparison of interviews more challenging.[32]

[28] Hall, *Foucault*, 73.
[29] Weissman, *Measuring*.
[30] Jo Kuper, Interview, 8 December 2016, explained this was the main rationale behind the MCUF project in South Sudan, but that the escalation of violence required reprioritization to focus on advocating for parties to the conflict to uphold IHL.
[31] Andrea C. Tricco et al., "Few Systematic Reviews Exist Documenting the Extent of Bias: A Systematic Review." *Journal of Clinical Epidemiology* 61, no. 5 (2008).
[32] Michael Q. Patton, *Qualitative Research and Evaluation Methods.* 3rd ed., (London: Sage Publications, Inc., 2002).

3 PRODUCTION AND USE OF THE EVIDENCE BASE

In exploring the production of the AHCC evidence base, this section examines the timeframe (*date of release*) and epistemological position of the documents captured by the rapid review, by considering *document origin* (geographical and organisation), *referent country, objective, methodology, use of secondary sources, definitions,* and *making statements and claims.*[33] In addition, it analyses how and for what purpose data is used by and circulated between various actors.

This analysis illuminates how the evidence base for AHCC is heavily influenced by a small group of international organisations, as an epistemic community, who use varying methodologies that are largely influenced by their own organisational and operational objectives. However, other actors with their own agendas take up, stretch, and manipulate this data to produce a global representation of AHCC. Thus, while the AHCC discourse is circulated as the 'truth of the matter',[34] this report highlights how it may be distinct from local realities of AHCC.

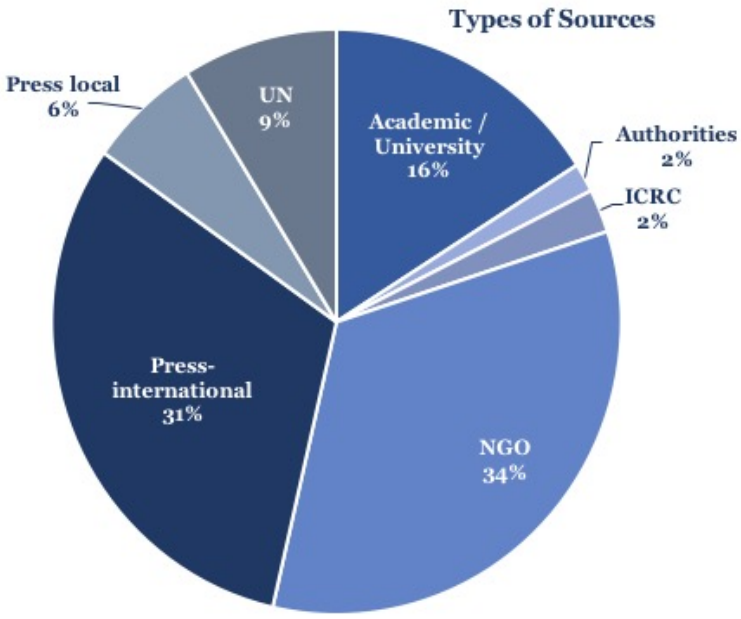
3.1 EPISTEMIC COMMUNITIES

An examination of review documents' origins and referent focus illuminates how particular regions and organisations have been privileged. This is significant because the documentation of AHCC can be significantly influenced by subjective perceptions of an attack, threat, or obstruction and its severity to warrant reporting.[35] Therefore, the pre-eminence given to specific organisations influences the content and quality of the evidence base and to what extent the dominant discourse is representative of AHCC on a global level. The heavy reliance on a small, influential group of organisations, which serve as an epistemic community, allows a particular perspective to have a dominating contribution to and *authority* over the evidence base and AHCC discourse. The *authority* of the epistemic community and the self-referential nature of the discourse determine what is deemed to be *knowledge* and *truth* around AHCC.

The breakdown of document origin (Graph 1 below) illustrates this privileging of specific organisations as data sources. Humanitarian sources represent 42% of total documents (of which 31% are ICRC, 49% NGO and 20% UN), which is disproportionately high as only 1/6 of all databases covered humanitarian sources.[36] More than 50% of NGO documents stem from

[33] These categories are derived from the *30 Category Analytical Database* used for analysis, see Appendix 5.
[34] Hall, *Foucault*.
[35] MSF, *Patient Care in Yemen Endangered by Violence; The MSF Experience in Yemen*, (Sana'a, Yemen; MSF, 2013).
[36] This included the WHO, UNSC, UNGA, UN OCHA Reports.

MSF, with the remainder coming predominantly from human rights organisations.[37] However, only one document was from a local NGO, the Al Mezan Center for Human Rights in Gaza. While a few other local organisations were included in INGOs' reports,[38] it still illustrates that national NGOs are not gaining proportional entrance or representation in the dominant discourse.



Graph 1, Types of sources.

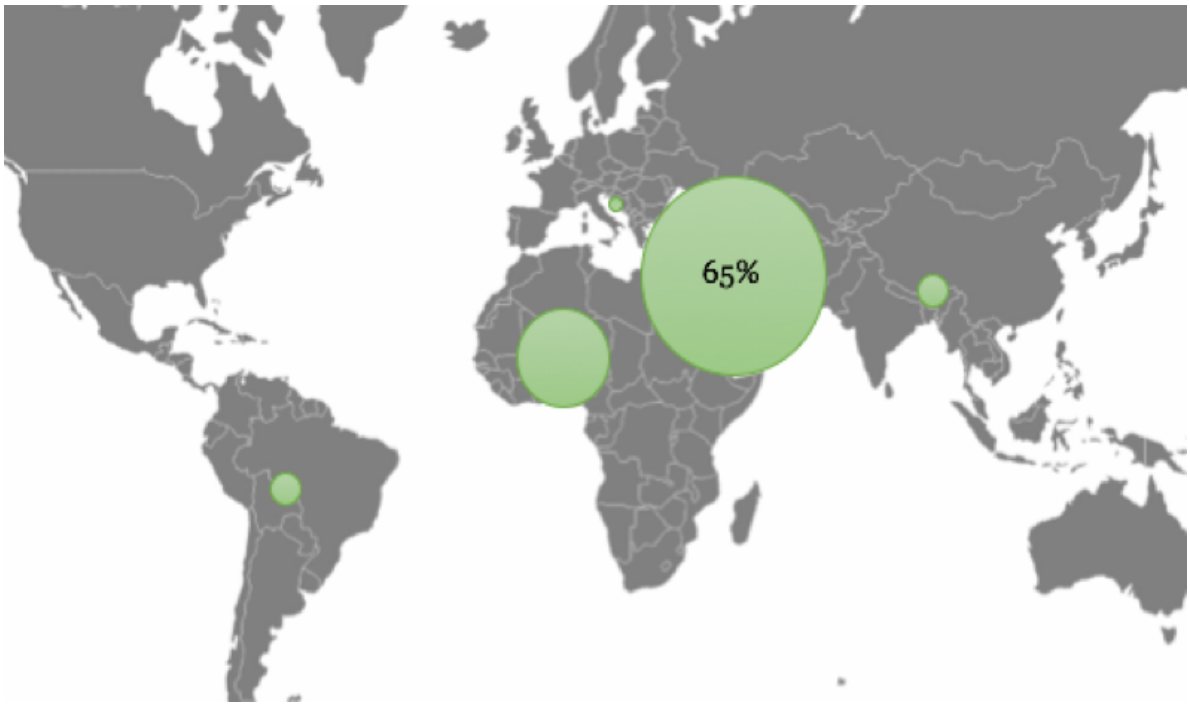
Similar privileging can be seen in the geographic location of reported incidents (Graph 2 below). Documents largely focus on the Middle East (65%) with remaining attention dispersed across Africa (20%), Asia (9%), Eastern Europe and South America (2%).[39] Specifically, Syria received the most attention (29% of total). The focus on Syria is a significant point that is returned to throughout analysis.

The evidence base is heavily shaped by the dominant contribution of a small epistemic community. United in perspective by a common set of principles and norms, the epistemic community aimed to raise attention, generate greater understanding, and engage actors from across disciplines to prevent and address AHCC.[40] However, this increased attention has, unintentionally, fuelled a closed-loop discourse that produces a restricted knowledge of AHCC.

In the process of circulation, the discourse is also distorted by geopolitics and the media. For example, over 70% of media documents relied on secondary sources (31% from ICRC and 29%

[37] Including Physicians for Human Rights, Human Rights Watch (HRW) and Amnesty International.
[38] Leonard Rubenstein, email communications, 22 February 2017.
[39] For regional classifications see Appendix 8.
[40] Jo Kuper, Seminar, January 26, 2017.

from UN) to make evidential claims. In addition, academic and UN documents also rely heavily on NGO or ICRC figures and claims. This is significant because many of these documents cite the ICRC and NGOs to make global statements. This can be problematic because ICRC and MSF do not claim or attempt to provide globally representative coverage (see 3.3). Nonetheless, when the data is picked up by press, academic, and UN documents it is often stretched to make global claims. Ultimately, this can produce a distorted evidence base and representation of AHCC that privileges certain voices, regions, and incidents while leaving other areas and attacks unaccounted for.



Graph 2, Location of reported attacks.

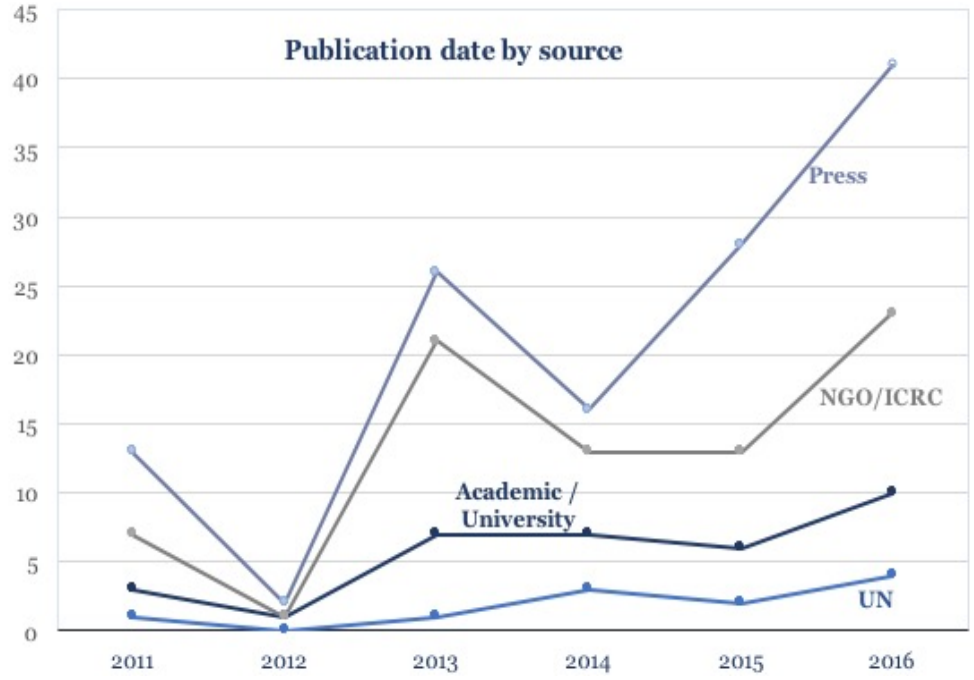
3.2 TIMEFRAME

Another significant factor in the production of the evidence base is the control over when events become public knowledge. The publication date of documents can create a significant lag-time between when events are documented versus when they enter the evidence base. Consequently, trends in the number of published documents seemingly do not reflect real-time trends in AHCC. For instance, the AHCC discourse was relatively silent with minimal publications from 2011-2012 (see Graph 3 below), which may create an assumption that AHCC was not a significant problem during this period. However, empirical data shows a substantial level of AHCC occurred in this time-period.[41] In another example, while the AHCC discourse has significantly risen between 2014-2015, the number of active conflicts decreased by 2 from

[41] ICRC. *Violent incidents affecting health care - Health Care in Danger*, (Geneva. ICRC. 2013).

2014-15.[42] Although this does not exclude that existing conflicts may have become more violent, the Aid Worker Security Database (AWSD) does suggest a decrease in overall humanitarian incidents from 2013 to 2014/2015, implying less violent incidents in humanitarian settings overall.[43]

Graph 3 illustrates how the attention on AHCC is influenced by the timing and quantity of publications from different disciplines, lag-times from events[44], and the authority asserted by different sources in the discourse. The combination of the authority of the epistemic community, the geopolitical interests that influence the press, and the lag-time of the release of documents further distort the representation and knowledge of AHCC.



Graph 3, Publication date by source.

Specifically, the lag-time in reporting on AHCC in Syria is significant. In the review, over 80% of documents on Syria appeared since 2015, corresponding to when Russia joined in aerial campaigns, and 52% in 2016. Yet there were clear violations against healthcare committed in previous years.[45] This suggests that geopolitical agendas merge with reporting and circulation

[42] International Institute for Strategic Studies (IISS). "Armed Conflict Database." *IISS*. 2017. https://acd.iiss.org (Accessed Feb 2, 2017).
[43] Humanitarian Outcomes. "Aid Worker Security Database (AWSD)." *Aid Worker Security*. 2017. https://aidworkersecurity.org/ (Accessed February 12, 2017). However, AWSD also has the issue of labelling of 'aid workers' and under / non-reporting of local healthcare / staff.
[44] Real-time events entered the discourse through statements or press releases (by UN, press, and occasionally NGO) which were primarily concerned with bombardment. Social media (not included in the review) provides a real-time alternative, but possesses considerable reliability and credibility concerns. Analysis of the role social media is an area that requires further research.
[45] HRW. *World Report 2012 - Syria; Events of 2011*. HRW. 2012. Accessed Feb 26, 2017. https://www.hrw.org/world-report/2012/country-chapters/syria

of the discourse to create a level of control over what receives attention and becomes knowledge.

In some cases, this lag-time may be necessary, given the time required to undertake rigorous data collection and scientific research. For example, documents using a mixed method approach and analysis of the conflict context involve a greater lag-time in publishing. Additionally, human rights organisations rely on triangulated methods to verify events, which can also delay the publication.[46] Ultimately, different reporting objectives impact the timeframe, which lends insight to what is included/excluded in the discourse and resulting knowledge on AHCC.

3.3 METHODOLOGIES

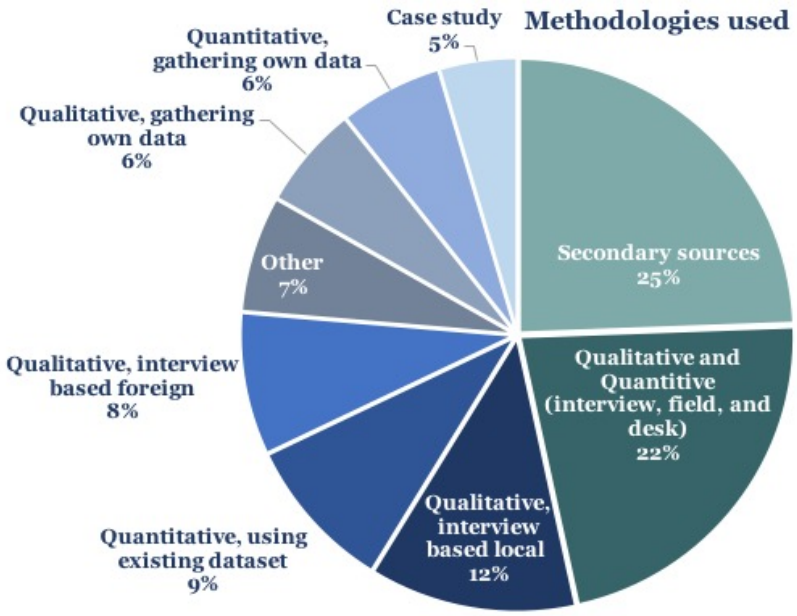
The *authority* of the epistemic community also influences what methodologies are recognised as valid. For example, the majority (57%) of NGO and ICRC documents use a mixed method approach that draws on desk and field based research. This methodology, according to our definitions, considers NGO (particularly MSF) and ICRC documents to have stronger credibility and rigour. However, these documents remain largely focused on the organisations' own operations (for ICRC, their National Red Cross and Red Crescent Societies) and do not capture data on most attacks that occur outside of their operations.

Furthermore, the discourse also limits certain voices and data by excluding or devaluing some methodologies used by local organisations for being insufficient and 'primitive'.[47] Multiple field-based experts highlighted that different working methodologies at national levels are not captured in the global evidence base.[48] Rather than indicating a methodological problem in local organisational reporting, it may illustrate how parameters set by the epistemic community exclude alternative perspectives and methodologies.

At the same time, the use of a variety of methodologies (see Graph 4 below) makes documents less compatible and undermines the combinative potential of current research. For example, UN documents captured in the review predominantly release statements using secondary data from multiple sources (mainly INGOs) whose methodologies differ. This mixing of data derived from different methodologies can create distortionary effects within the evidence base. Ultimately, the lack of a common methodology in data collection reaffirms the heavy reliance on recycling data published by the epistemic community. This highlights the need to promote the use of common, appropriate methodologies across organisations and to create greater space for local actors and data to be represented in the global evidence base. The primary need

[46] James Le Mesurier, Seminar, January 26, 2017.
[47] Anon, interview, February, 2017.
[48] Jo Kuper, Interview, 8 December, 2016; Dr. Sherin Varkey, Interview 27 January, 2017.

to establish standard methods for systematic data collection has been mandated to the WHO[49] and is currently underway.



Graph 4, Methodologies used.

3.4 DEFINITIONS, LANGUAGE AND QUANTIFICATION

Problems with restrictive and inconsistent definitions and classifications for AHCC, despite being acknowledged, continue to be substantial and hinder the compatibility and comprehensiveness of the evidence base. Specifically, the broad definition for AHCC established by the WHO is often narrowed when put to use in documents, particularly by non-humanitarian sources. This narrowing of definitions limits the conception of AHCC and privileges the reporting of particular forms of physical attacks such as bombardment. As a result, other routine forms of AHCC, such as threats, harassment and obstruction, fall outside this limited conception and may be excluded.

While some organisations (such as ICRC) have made efforts to use comprehensive definitions to document AHCC, it is still largely the physical forms of attacks that dominate the discourse, as illustrations or as secondary data used by other sources. For example, 72% of UN reports referred to bombing/aerial attacks, compared to only 25% of reports from MSF and ICRC. However, given that the UN is highly dependent on ICRC/NGO reporting, this illustrates how secondary data is selectively taken up to privilege particular forms of attacks. This reductive

[49] World Health Assembly (WHA). *WHO's Response, and Role as the Health Cluster Lead, in Meeting the Growing Demands of Health in Humanitarian Emergencies, WHA65.20*, WHO. 2012. Accessed March 4, 2017. http://www.refworld.org/docid/57319b0f4.html

aspect of the AHCC discourse was corroborated in interviews, expressing that data collectors may be put off reporting certain forms of violence such as looting of facilities or obstruction of immunization campaigns as it may not receive much attention. This could be the result of a discourse that privileges violent 'attacks', immediate 'danger' and facilities or staff 'under fire'.[50]

Overall, less than 10% of documents provided an *explicit*[51] definition of 'attack' and of those, 88% came from humanitarian organisations. Additionally, even within organisations there can be multiple definitions in use, illustrating the difficulty of streamlining definitions.[52] However, explicit definitions were found to be more comprehensive than *inferred* definitions. For example, while only 11% of documents included threats in their definitions of 'attacks', half were documents that provided explicit definitions and a mere 10% were those using *inferred* definitions.

In addition, the obstruction of healthcare, which has a high impact on affected populations, was insufficiently represented in documents. This is likely due to being considered less severe than physical attacks and underreporting. Obstruction typically does not attract external attention, is unlikely to be covered by the press, may be normalised and thus not recorded by healthcare workers, and is difficult to claim due to lack of visual evidence.[53] As a result the impact of obstruction, such as the interruption of vaccination campaigns in Yemen[54] or the blockage of ambulance and patient movement between Palestine and Israel[55], remains under-documented and under-assessed.

Even when security incidents are documented, they may not enter the AHCC evidence base, but instead remain as internal incidents stored by NGOs or reported to the AWSD. This warps the conception of AHCC by primarily including major physical attacks, while leaving other routine incidents of AHCC, such as the obstruction experienced in Palestine under-considered. Thus, the overall, long-term impact on the strength of and access to health systems is also under-documented and requires more examination and analysis.

This reductive conception of AHCC is also upheld by quantification efforts, which can isolate statistics, hinder contextual analysis, and mask the significance of single events.[56] In this way, reductive definitions and an emphasis on quantification uphold parameters that determine what is considered report worthy. This value judgement varies between national and international contexts and increases the risk of missing early warning signs signalling a build-up on tension. A 2014 MSF study highlights that actions classified as *violence* are highly dependent on context and how the actors in a particular incident perceive its meaning.

[50] Dr. Sherin Varkey, Interview, 27 January 2017.
[51] '*Explicit' and 'inferred'* are classifications used in the *30 Category Analytical Database*, see Appendix 5.
[52] Christian Captier, Key Informant, 15 December 2016
[53] Hussam Wafa Issa and Moss, D., Interview, 31 January 2017.
[54] Dr. Sherin Varkey, Interview, 27 January 2017.
[55] Hussam Wafa Issa and Moss, D., Interview, 31 January 2017.
[56] Michaël Neuman, "'No patients no problems': Exposure to Risk of Medical Personnel Working in MSF Projects in Yemen's Governorate of Amran." *The Journal of Humanitarian Assistance*, (Feb 2014).

Therefore, the privileging of particular forms of attacks in the discourse may not reflect local perceptions. Using wider definitions can encompass the contextualised meanings given to terms and enable more comprehensive monitoring, risk analysis, early warning, and prevention. Future research and analysis needs to remain vigilant to employing comprehensive definitions as an important part of increasing the understanding of AHCC.

3.5 MAKING STATEMENTS AND CLAIMS

The reductive parameters established by narrow definitions also influence how AHCC are framed. These parameters relate to the emergency imaginary (see 2.3), which frames attacks as an exceptional, unpredictable, and immediate risk. This is evidenced by the titles of major research and advocacy campaigns such as *Health care in Danger* (ICRC 2011) and *Medical Care Under Fire* (MSF 2013). While organisations like ICRC and MSF have made efforts to broaden the research and conception of AHCC, efforts to garner attention and policy space often remain focused on noteworthy physical attacks. This was evidenced when Joanne Liu, International President of MSF, spoke at the Munich Security Conference (2017) and applied the emergency imaginary to garner attention, saying: 'healthcare is under attack' and 'aid convoys are fired on, hospitals are bombed'.[57] Thus, in recognising the urgency of AHCC, practitioners and policy-makers must be cautious about institutionalising an 'emergency logic'[58] approach, which can privilege immediate, short-term action over building an understanding of root-causes and long-term responses.

In addition to creating an image of urgent risk, the imaginary also demands an immediate and 'appropriate' response. The research reveals that a preferred response includes stating the perpetrators (over ¾). However, as previously described (3.3), current reporting systems and data collection methodologies are typically not equipped to adequately investigate perpetrators. Instead, documents making claims about perpetrators are primarily deriving their evidence from secondary sources, which themselves often do not consider perpetrators (in part due to the politics and risk that may accompany reporting, see 6.5). This highlights the potential for data to be manipulated to fit the 'response' called for by the discourse.

Furthermore, 41% of documents frame attacks on a *global* scale. However, an evaluation of the evidence base indicates that efforts to produce claims on a generalised scope are problematic and can be misleading, due to the disparity of methodologies and complex nature of individual incidents. Nearly half of the short statements and press releases that claimed a global phenomenon used figures derived from limited sources, of whom 25% used methodologies developed for country-specific analysis. This illustrates how some of the statements and claims

[57] Joanne Liu, "Panel Discussion 'Health security: Small bugs, big bombs.'" *Munich Security Conference video, 04:31, Feb 18, 2017.* https://www.securityconference.de/en/media-library/munich-security-conference-2017/video/panel-discussion-health-security-small-bugs-big-bombs/ (Accessed March 5, 2017).
[58] Craig Calhoun, "A World of Emergencies: Fear, Intervention, and the Limits of Cosmopolitan Order." *Canadian Review of Sociology & Anthropology* 41, no. 4 (2004).

populating the AHCC discourse have manipulated the evidence base to produce a particular image of AHCC, which may be apart from reality.

As discussed, the heavy reliance on data from MSF and ICRC to produce a global representation of AHCC has several implications. However, there is currently a lack of alternatives or standardised data collection systems. As such, the UN, press, and academics are likely to continue relying on MSF/ICRC methods, data and documents to create knowledge about AHCC that may not progress an understanding of the reality of these attacks. To advance systematic and comprehensive data collection, research, and analysis a common taxonomy of classifications and methods is required. As a well-recognised need, the WHO has a mandate (WHA 65.20) to provide global leadership in developing methods for systematic data collection and dissemination.[59] Practitioners, academics, think tanks, and policy-makers concerned with advancing research and analysis of AHCC should support and inform the WHO's development of these tools, for specific suggestions see Recommendation 1.

4 STRENGTHS OF THE EVIDENCE BASE

Based on the primary research focus to evaluate the existing evidence base on AHCC, the report now turns to an examination of the strengths and weaknesses (section 5). In addition, an in-depth assessment on MSF, ICRC, and WHO reporting, as dominant influences on the evidence base, are provided (see Boxes 1-3 below).

The rapid review highlights several documents that demonstrate best practices in data collection, research methodologies, analysis, or theorising. Analysis of their strengths provides a small, but promising, collection of approaches that can be used and further developed in future research cooperation. This highlights the great potential of combining regional and contextualised expertise with strategic networking opportunities on a global scale.

4.1 THE POTENTIAL OF CONTEXTUALISED RESEARCH

As indicated above, there is a strong need for more contextualised research and analysis. A few think tanks and scholars have usefully advanced the argument for and steps towards greater contextualised research and analysis that improves understanding and guides more effective responses and protection strategies.

Rachel Irwin argues that an understanding of the scope, causality, and drivers of AHCC is poorly understood in part because of the emphasis on macro-analysis, which typically reinforces a set of core perceptions that may not reflect the reality of attacks.[60] These core perceptions focus on three dynamics: shrinking humanitarian space, the changing nature of

[59] WHA, *WHO's Response*
[60] Rachel Irwin, *Violence against Health Workers in Complex Security Environments*, (Solna: SIPRI, 2014).

war, and the politicisation of aid. However, Irwin contends that while a reliance on these perceptions may help raise attention and put AHCC on the global policy agenda, these perceptions are unsupported by data. In this way, macro-analysis and globally aggregated data can actually mask individual contexts and incidents, thereby limiting the understanding of and effective responses to AHCC. Rubenstein expands this emphasis on distinguishing between individual contexts and dynamics of AHCC, pointing to the distinction between motivating factors and protection strategies for humanitarian aid workers versus local healthcare workers.[61]

These distinctions emphasise the context-specific nature of individual AHCC, which are influenced by and should be understood through the 'web of social relationships' (both macro- and micro-level) that shape aid relationships and causal drivers of violence.[62] It is only through contextual research and analysis that the highly complex nature of AHCC, including the multiplicity of factors and mixed motivations of perpetrators, can be understood and addressed. Kate Clark (2016) demonstrates the need for contextual analysis of perpetrators' motivations with an example of Afghan healthcare workers and clinics believed to be targeted and attacked due to members of the government and Afghan National Security Forces lacking respect or understanding of medical impartiality.[63] A contextual analysis of AHCC drivers also enables a greater understanding of potential protection strategies that suit local dynamics. In Afghanistan, Clark points to local strategies such as lobbying the government to improve knowledge of and respect for medical impartiality among military forces.[64]

There is a strong need for more contextualised research, which may be usefully advanced through research collaboration between western-based academics and think tanks with regional and national research groups that have context-specific expertise. See suggestions in Recommendation 2, with a list of potential partner organisations and funding opportunities located in Appendices 10 and 11.

4.2 CREATIVITY AND NEW TECHNOLOGIES IN MONITORING AHCC

In addition to using new collaborations to advance contextualised research, there is also potential cooperation in learning from and adapting existing reporting and monitoring mechanisms. Below are three examples of reporting systems, both existing and under development, that may help advance data collection and research on AHCC.

First, the Health Resources Availability Mapping System (HeRAMS), developed by the WHO, is used to assess damage and function of health facilities in emergency contexts. While this

[61] Leonard Rubenstein, "A Way Forward in Protecting Health Services in Conflict: Moving Beyond the Humanitarian Paradigm." *International Review of the Red Cross* 95, no. 890 (2013).
[62] Irwin, *Violence*, 9.
[63] Kate Clark, *Clinics under fire? Health Workers Caught up in the Afghan Conflict*. Online. Afghan Analysts Network. 2016. Accessed Jan 2, 2017. https://www.afghanistan-analysts.org/clinics-under-fire-health-workers-caught-up-in-the-afghan-conflict/
[64] Ibid.

system does not report on perpetrators or motivations of AHCC, it has established systematic local level reporting methods and verification that aim to maintain the provision of health services.[65]

Second, the Monitoring and Reporting Mechanism (MRM), established from UNSC Resolution 1612, is co-lead by UNICEF and managed by country-level task forces to provide 'timely and reliable information on six grave children's rights violations' in situations of armed conflict. This information is systematically reported to the UNSG. Significantly, one of the six violations includes attacks on hospitals and schools.[66]

Third, there are two exciting technology-based reporting tools currently being explored specifically for AHCC. The SHCC is developing and testing a mobile tool for tracking incidents of AHCC.[67] In addition, MSF has partnered with Forensic Architecture, a research agency at Goldsmiths University, London, that undertakes spatial research and analysis, using digital mapping technology to help investigate the events of certain AHCC.[68]

While further research into these possibilities is needed, these examples illustrate how creative partnerships and new uses of technology may enable new monitoring mechanisms on AHCC.

4.3 CROSS-DISCIPLINE LESSON LEARNING IN DATA COLLECTION

An area for joint learning exists with humanitarian security databases.[69] Although these databases do not provide health-specific data, they provide useful examples for tracking broader forms of attacks on civilian spaces, humanitarian objects, especially in under-reported localities. An evaluation of these databases can help avoid duplicating shortcomings and provide lessons for the development of standardised data collection on AHCC.

First, the Security in Numbers Database (SiND)/ Aid in Danger by Insecurity Insight is used to monitor 'all types and degree of severity of security incidents'[70] to give a broader picture of violence in specific contexts. Their blog 'The impact of explosive weapons on the delivery of humanitarian aid'[71] could serve as an example of comparing the impact of a particular form of violence across different regions, as opposed to all kinds of violence in one region. Protection

[65] WHO, "Health Resources Availability Monitoring System (HeRAMS)." *WHO*. 2017. http://www.who.int/hac/herams/en/ (Accessed Feb 9, 2017).
[66] United Nations Children's Fund (UNICEF). *Guidelines – Monitoring and Reporting Mechanism on Grave Violations against Children in Situations of Armed Conflict*. (New York: UNICEF, 2014).
[67] Leonard Rubenstein, email communications, 22 February 2017.
[68] Pierre Mendiharat and Varraine-Leca, A., "Hospital Airstrikes: Gathering Evidence Through Images." *MSF CRASH*, 2017. http://www.msf-crash.org/en/sur-le-vif/2017/02/15/7406/hospital-airstrikes-gathering-evidence-through-images/ (accessed Feb 3, 2017); Forensic Architecture (FA). "About: Project." FA. 2015. http://www.forensic-architecture.org/project/ (Accessed Mar 2, 2017).
[69] For additional overview of the relevance of existing 'data collection systems' see Appendix 9.
[70] Insecurity Insight (II). "Security in Numbers Database (SiND): Monitoring actions that interfere with aid delivery." *II*. 2017. http://www.insecurityinsight.org/files/SiND%20Info%20Sheet.pdf (Accessed Feb 12, 2017)
[71] Insecurity Insight (II). "Aid in Danger - Explosives." *II*. 2017. http://www.insecurityinsight.org/aidindanger/explosives/ (Accessed Feb 12, 2017).

strategies could be developed based on evidence of what worked against particular forms of violence in other contexts and tested for applicability elsewhere.

Second, the AWSD of Humanitarian Outcomes[72] uses quantitative reporting to track 'major incidents of violence against aid workers'.[73] While its reliance on quantitative data recreates some of the problems inherent in current documentation of AHCC, the AWSD does include various locally contracted staff and spans across a broad range of humanitarian actors. Furthermore, the AWSD verifies reports with the help of regional and field security consortiums.

However, it is significant to note that these databases do not address two significant constraints in current AHCC documentation; they neither provide new ideas or methods for qualitative analysis nor do they use comprehensive definitions of 'attack' that account for threats, obstruction, or harassment. Therefore, the need for methodologies that support comprehensive, contextualised research and analyses persist.

[72]Humanitarian Outcomes, *Aid Worker Security*. 2017. https://aidworkersecurity.org/ (Accessed Feb 12, 2017).
[73] 'Major incidents' are defined as killings, kidnappings, and attacks that result in serious injury.

WHO LEADERSHIP IN REPORTING

With the proliferation of attention on AHCC and a growing range of national, regional, and international actors reporting on and making claims about the issue, the WHO has a key leadership role in collecting and disseminating data on AHCC. This has been called for by the World Health Assembly 2012 Resolution (WHA 65.20).[1] The WHO has taken steps forward by establishing comprehensive definitions and beginning to consolidate the global evidence base on AHCC. However, despite this progress important limitations remain acknowledged but unaddressed in its work, as evidenced in its 2016 report.[2]

Strengths: Broad definitions and triangulation with other databases

One of the strengths of WHO reporting was the inclusion of a broad range of attacks in the report, although its reliance on sources which may have been quite selective in their inclusion of forms of attacks and violence could create a bias even though the WHO theoretically includes a much broader range of attacks.[3] WHO reports are provided with additional rigor by including data from the Aid Worker Security Database (AWSD), the Armed Conflict Location and Event Data Project (ACLED), the Council on Foreign Relations (CFR) and Physicians for Human Rights (PHR).[4]

Weaknesses: Acknowledged limitations, but no solutions in own report

To be fair, most of the limitations are explicitly mentioned, such as the reliance on secondary data which are collected "non-standardized manner using different classifications, focusing on different geographical areas, and for different purposes." However, while it is mentioned that "not all available secondary data provide information about their source and verification process",[6] it is not stated whether any such mechanism existed when the WHO researchers looked at open sources for secondary data.

A similar problem concerns the inclusion of *intentionality:* it appears that the WHO simply accepts whatever the original source stated as motivation despite of the lack of verification or standardization of establishing this. It is stated that "while 62% of attacks were reported as intentionally targeting health care, more detail of the evident or presumed reasons for such attacks would help to enable better understanding", but nothing is mentioned about the need to verify this presumed intentionality.[7]

Another problem is the (perhaps inevitable) trade-off in determining whether to report with the smallest possible time lapse and risk to miss certain data or to include as many data as possible and wait until they are available. Covering the years 2014-2015 in their 2016 report, the WHO acknowledges that certain information might not have been available yet which could explain why there was a considerable difference of attacks reported in both years.[8]

[1] Preeti Patel et al., "Documenting Attacks on Health Workers and Facilities in Armed Conflicts." *Bulletin of the World Health Organisation*, August 30, 2016. http://www.who.int/bulletin/online_first/BLT.15.168328.pdf (accessed February 2, 2017).
[2] WHO, *Attacks on Healthcare.*
[3] Ibid.
[4] Ibid.
[5] Ibid: 8.
[6] Ibid: 8.
[7] Ibid: 8.
[8] Ibid.

Box 1, Reporting by WHO.

ICRC REPORTING FOR THE PROTECTION OF HEALTHCARE

Health Care in Danger (HCiD) provides a useful attempt at creating an overview of AHCC on a global scale and ICRC is provides leadership in documenting cases of AHCC as IHL violations. The inclusion of a variety of sources and application of broad definitions demonstrates awareness of local realities that need to inform protection strategies. However, a tendency to quantify qualitative data and the use of varying scope and methodologies limits the potential for comparing or amassing documents for further analysis or theorising. Furthermore, a degree of inconsistency within their own reporting confirms that, ultimately, the ICRC's data is predominantly intended for their own operational purposes, which creates constraints on its use for other research objectives.

Strengths: Triangulation of data sources and comprehensive definitions

A strength of ICRC data collection is their triangulation of data sources (media, websites, and internal humanitarian data) in reporting on AHCC. In particular, their 22-country study (2013) is largely based on field observation, which increases its credibility. More than 40% of all incidents were reported by medical personnel, other staff and victims. Other sources included National Red Cross and Red Crescent Societies, ministries of health, local and international organizations, ICRC field staff, and local media.[2]

Another strength is the use of comprehensive definitions for violence and attacks, which include threats and a range of different weapons and acts.[3] These comprehensive definitions enable documentation of the more routine forms of violence committed against healthcare, such as the looting of drugs and medical equipment.[4]

Weaknesses: Bias in data collection and inconsistent reporting

No information is provided on how 'qualitative data is translated into quantitative data' even though ICRC reports consist almost entirely of quantitative data, often derived from qualitative information.[5] Moreover, the ICRC explicitly acknowledges the limitation of a strong reliance on international media sources in one report, which 'may have unintentionally emphasized incidents affecting international organizations'.[6] Ultimately, their use of different methodologies across studies results in slightly varying conclusions in each.

Furthermore, two main ICRC reports mention that they will be supplemented with a more encompassing final report in 2015. However, unless this was a reference to Resolution 4 (passed by the 32nd International Conference of the Red Cross and Red Crescent in December 2015) neither the HCiD website[7] nor the databases used in the rapid review provided any evidence that this happened.

[1] ICRC, *Sixteen-Country Study*, 5.
[2] ICRC, *Violent Incidents*.
[3] ICRC, *Sixteen-Country Study;* ICRC, *Violent Incidents.*
[4] ICRC, Making the Case.
[5] ICRC, *Sixteen-Country Study, Annex 1.*
[6] ICRC, *Violent Incidents*.
[7] ICRC, *Sixteen-Country Study;* ICRC, *Violent Incidents;* ICRC, *HCiD Project.*

Box 2, Reporting by ICRC.

MSF: RIGOUR AND VALIDITY OF THEIR REPORTING

Strengths and weaknesses of MSF reporting reflect its mandate, seen in the self-understanding of the Centre de Réflexion sur l'Action et les Savoirs Humanitaires (CRASH) to 'inspire debate and critical reflection…to improve the association's actions.'[1] The focus is on MSF directed (50%) and supported (50%) facilities and thus primarily for internal learning. However, MSF speak out publicly in certain cases 'to alert the public to abuses occurring beyond the headlines'[2] But as only the most brutal attacks on MSF medical missions are denounced publicly[3], this might create a level of exceptionalism (47% of reports on Syria, 20% on Yemen). Moreover, the fact that the first MSF report appeared only in 2014 raises the question whether there was an increase in attacks or their severity, or a shift in organisational motivation for publicizing.

Strengths: Contextualised research and data triangulation

73% of reports combine quantitative and qualitative methods and triangulate multiple sources of data, including primary data, field research and multidisciplinary secondary data (local healthcare, government, social sciences and security documents). 100% are context specific and do not attempt to generalise at a regional or global level. This allows contextual dynamics to be examined, embedding accounts of AHCC within wider social and violence contexts ('healthcare facilities mirror tensions of … society').[4]

Moreover, 87% include wider conflict analysis, enabling a deeper level of analysis and 67% of documents engage in theorising: contextual research and field knowledge enable MSF to analyse causality ('due to the fact that the ethnic lines have been drawn inside Protection of Civilian Sites (PoCs) just as they have been outside, PoCs have themselves now become a pawn in the conflict').[5]

Weakness: Gaps in the evidence base

What becomes evident, however, is the need to cooperate with appropriate agencies to establish and investigate intention. In MSF reports, there is limited identification of intention (50%): In accordance with its principles, MSF is 'not prepared nor equipped' to conduct formal investigations or positioned to establish military intention, reports do not attempt to determine intention, highlighting difficulties of 'real or perceived siding with the alternative party to the conflict'.[6]

Also, common definitions are lacking: attack (94%) and violence (100%) are predominantly *inferred,* rather than explicitly *defined*. The majority do, however, reflect IHL definitions, including multiple forms of violence, from threat to physical.[7] An IHL grounding gives credibility whilst a lack of explicit definition makes compatibility or consolidation a challenge, recognising also that individual understandings of meaning will differ, which impacts what gets reported.[8]

[1] CRASH. *MSF-CRASH*. 2017. http://www.msf-crash.org/en/qui-sommes-nous/ (Accessed Feb 28, 2017).
[2] MSF. "News." *MSF Association*. 2017. http://association.msf.org/news (Accessed February 28, 2017).
[3] Abu Sa'Da et al., *Polymorphous Reality*.
[4] MSF, *Patient Care in Yemen*.
[5] MSF. *MSF Internal Review of the February 2016 Attack on the Malakal Protection of Civilians Site and the Post-event Situation*. MSF. 2016. Accessed February 21, 2017. http://www.msf.org/sites/msf.org/files/malakal_report_210616_pc.pdf; Justin Armstrong. *Changes in Medical Practice in Syria: Dilemmas and Adaptions in Medical Facilities Continually Threatened by Attack*. Geneva. Médecins Sans Frontières. 2016. Accessed January 16, 2017. https://www.msf.org.uk/sites/uk/files/syria-report-final.pdf
[6] MSF. *Review of Attacks on Al Quds Hospital in Aleppo City*. MSF. 2016. Accessed January 15, 2017. http://reliefweb.int/sites/reliefweb.int/files/resources/Al%20Quds%20Public%20Report.pdf
[7] MSF, *Dilemmas and Adaptations.*
[8] Neuman, *No Patients, No Problems.*

Box 3, Reporting by MSF.

5 WEAKNESS OF THE EVIDENCE BASE: TRENDS, MOTIVATIONS & PATTERNS

The research also uncovered some critical weaknesses in the current evidence base. In particular, examining the extent to which trends, motivations, and patterns in AHCC can be drawn from the evidence base highlights a disparity between the claims circulated by the dominant discourse and more realistic estimations supported by analysis of the evidence base. This section examines analytical categories for *trends*, *motivations*, and *violation statements*[74] in relation to epistemology and theorising to assess comparability, credibility, and reliability. Importantly, it is precisely the weaknesses of the evidence base that devalue statements of motivations or trends.

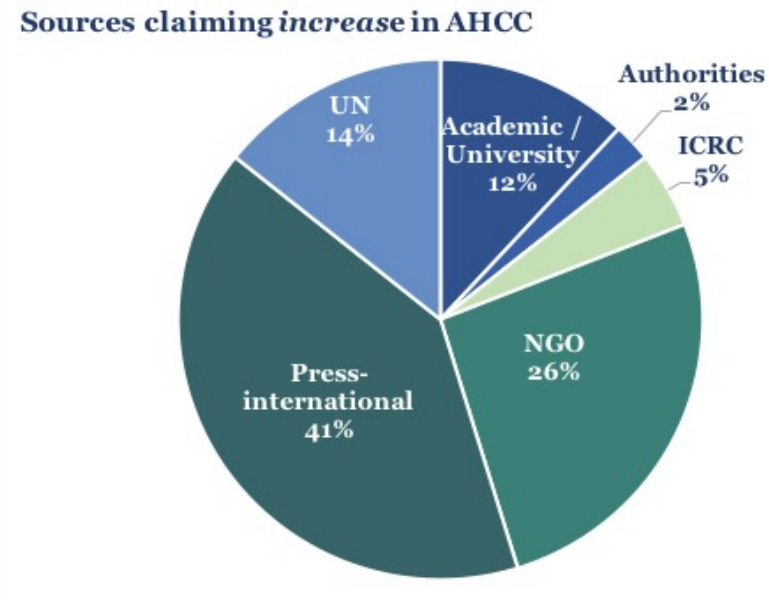
5.1 TRENDS

Making claims about figures and trends is significant for attempts to establish the scope of AHCC. A prominent claim is that AHCC are *increasing*. In the review, 44% of the documents made a statement about trends, of which 74% claimed that attacks were increasing. The prominence of this claim has led the discourse to produce a general sense that AHCC are increasing. However, there is not sufficient, reliable empirical evidence to support this claim.[75] Three conditions of the current evidence base hinder establishing trends: lack of baseline data, unreliability of globally aggregated data (due to lack of systematic data collection and the potential for high-impact events to skew long-term trends), and increasing figures may reflect improved monitoring and documentation rather than increasing incidents.[76]

Claims of increasing attacks lack credibility because many documents are simply recirculating data based on an assumption of increasing AHCC,[77] rather than evidence. For example, 72% of the documents that claim attacks are increasing are international press, NGOs and ICRC (See Graph 5 below). Significantly, almost half of the documents claiming an increase in AHCC base this claim solely on interpretation of secondary data/other databases recording attacks. Significantly, only slightly above ¼ of documents collecting primary data actually claim an increase in AHCC themselves.

Approximately 60% of documents stating *increase* were published after 2014. In contrast, no documents published in 2012 reported any trends. This shows that claims of increasing rose during the same period that the AHCC discourse was increasing in prominence (section 3.2). This may indicate that the AHCC discourse emphasises making claims about increasing AHCC, which helps maintain the prominence of the discourse on the global policy agenda.[78]

[74] These categories are derived from the *30 Category Analytical Database*, see Appendix 5.
[75] Leonard Rubenstein, Interview, January 19, 2017; Irwin, *Violence*.
[76] Ibid.
[77] Irwin, *Violence*.
[78] Ibid.



Graph 5, Sources claiming increase in AHCC.

5.2 MOTIVATIONS

The question of motivations is significant to the development of theorising and effective protection strategies. At the same time, the difficulty of establishing motivation is widely acknowledged.[79] Motivations can be analysed on macro- and micro-levels. However, macro-level drivers often receive more attention, which can mask micro-level, contextual drivers.[80] The research examined whether sources stated *motivation* and what factors might have played a role in that decision-making process.

The documents were relatively split in whether they stated motivation; 45% of documents did *not state* intentionality, whereas 39% asserted the attacks were *intentional*. This split is likely due to the difficulty of establishing motivation. Weissman points out a similar situation in attacks on humanitarian workers, where just over half of the cases are able to judge motivation.[81] The difficulty of establishing motivation highlights both the challenge of gathering sufficient evidence as well as the politics involved in reporting and claiming motivation.

The politics of reporting AHCC can hinder, block, and even create danger around efforts to establish motivation. Mayday Rescue explained that even when the person recording an attack can make a strong estimation of the perpetrator and intentionality, it is unlikely to be reflected

[79] Project launch Meeting, 10 November, 2016
[80] Irwin, *Violence*.
[81] Weissman, *Measuring*.

in their report of the incident. This is due not only to the difficulty of gathering evidence, but also is a reflection of the political power needed to make these assertions. For example, in the case of Syria, certain observations, such as identifying the aircraft models used by different militaries, can be made by personnel on the ground to determine the perpetrators of airstrikes.[82] Furthermore, a degree of knowledge about the military chain of command indicates the level of planning required for particular airstrikes, which undermines the credibility of a claim that an attack was unintentional. However, accused perpetrators (such as Russian military officials) have successfully rendered allegations false by portraying them as 'fake proof' or 'staged'.[83] Another example of the politics of establishing motivation was provided by PHRI, who explained the challenge and low success rate of recording official complaints against the government of Israel for delaying or denying access to healthcare.[84] Of 31 formal cases of complaints only 6 or 7 were dealt with and the rest dismissed for inadequate proof. PHRI explained that without video evidence, the Israeli government is able to cancel the majority of complaints, highlighting again the ability for political power to supersede evidence. These political dynamics are significant as it illustrates that in some conflicts and regions political support, in addition to improved methods for data collection and a strengthened evidence base, is needed.

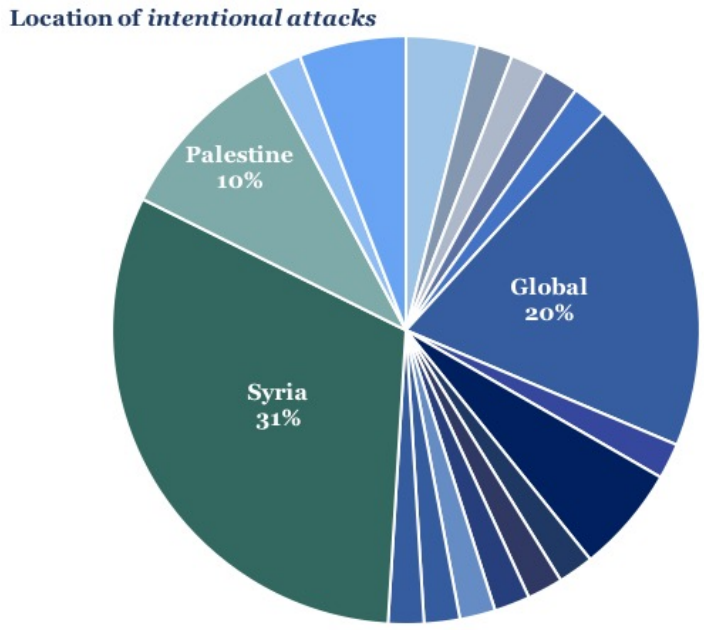
However, one promising direction revealed by the review is the potential for multidisciplinary research and theorising to advance the work on motivations. The majority (64%) of highly theoretical documents (50% or more of theorising) were concerned with attacks deemed *intentional*. Given the difficulty and potential risks associated with establishing legal intent, multidisciplinary research may provide a promising alternative (see Recommendation 2a).

5.3. PATTERNS

The research also evaluated the extent to which patterns can be identified, globally or regionally. The analysis focused on combinations of specific categories: *perpetrator*, *group* and *object attacked*, *stated motivation, stated trend*s, and *violation statements*.[85]

Significantly, only 1/3 of review documents reported local healthcare providers as the attacked group. In contrast, ICRC reported that over 90% of attacks affect local health workers, with unknown estimations ranging around 99%.[86] This divergence can partly be explained by variation in reporting methods: reports focusing on attacks on local providers rely heavily on interviews or secondary data from local sources, whereas the discourse relies broadly on data from international organisations and NGOs. This distinction is exacerbated by a significant reporting gap on 'non-internationally supported' healthcare providers (i.e. Ministry of Health, civil society).[87]

[82] James Le Mesurier, Interview, 11 January 2017
[83] Emma Winberg, Interview, 11 January 2017.
[84] Hussam Wafa Issa and Moss, D., Interview, 31 January 2017.
[85] These categories are derived from the *30 Category Analytical Database*, see Appendix 5.
[86] ICRC*, Violence*.
[87] Sarah Cotton, Project launch Meeting, 10 November 2016.



Graph 6, Location of intentional attacks.

In 1/3 of documents, the perpetrator is either *not specified* or *not identified*, whereas 40% of those stating a perpetrator claim *multiple* aggressors and 32% specify *state armed forces*. Moreover, of attacks carried out by *state forces*, 70% are considered *intentional*. Documents are more than twice as likely to report attacks perpetrated by *state armed forces* as *intentional* than by all other actors. This pattern is largely influenced by the high number of incidents reported in Syria, constituting 30% of all incidents reported as *intentional* and additionally being a focus area in 80% of documents with supposedly *global* scope (see Graph 6 above). Interestingly, the combination of these categories was equally frequent among different sources and epistemological objectives. This illustrates not only how the discourse is dominated by particular incidents/conflicts, but also how exceptional cases can skew globally aggregated data and patterns.

Statements of *violations*[88] were also influenced by the discourse, as they are used to affirm the importance of AHCC and help maintain global attention on the issue. In 36% of documents a statement was made on the reported attack as a violation of IHL, 75% of those referred to the position taken either by NGOs, ICRC or the UN. Referring to these organisations (as gatekeepers) can provide a source of non-legal authority for the claims being made. Framing AHCC as a breach of IHL, can help the discourse to garner international attention and demand action.

Overall, the research found that attempts to draw global patterns and trends were problematic and lacked credibility. Claims of patterns and trends were likely influenced by the expectations and knowledge produced by the discourse, rather than emerging from systematic, global

[88] Includes violations of IHL, Geneva Conventions, Human Rights, medical neutrality, war crimes, 'other' or 'none'.

empirical evidence. Consequently, claims about patterns and trends are derived from a specific context and considering the paucity of the evidential base, it remains highly questionable to what extent generalisations can be drawn. In discussing attacks on humanitarian workers, Weissman emphasises the need for qualitative, contextual data to determine trends.[89] This report draws the same conclusion; greater qualitative, contextual data is needed to establish trends or patterns in AHCC. Trends and patterns that seem credible on a micro-level might not be applicable to other contexts and needs to be carefully contextualised.

5.4 MEDICAL NEUTRALITY AND CLAIMS OF VIOLATIONS

The rapid review was designed to identify existing debates around the principle of medical neutrality in conflict settings. This included examining how/if the principle is upheld as well as if AHCC is framed as a violation of medical neutrality. In total, 21% of documents discussed medical neutrality or impartiality in relation to AHCC, although only 7% of documents framed AHCC primarily as a violation of medical neutrality and there was no significant theorising around the issue. The research, ultimately, illustrated the importance of distinguishing between medical neutrality and impartiality and highlighted how medical ethics can be understood differently across contexts, as they are embedded in cultural and social practices, which makes global, non-contextualised comparisons difficult.

A possible explanation for why medical neutrality is not more significant relates to some data collectors having little knowledge of the principle. For example, in Yemen it is reported that few data collectors are familiar with the principle, meaning that attacks are less likely to be reported as a violation.[90] Furthermore, multiple scholars and practitioners have indicated the important operational and strategic distinction between medical neutrality versus impartiality.[91] This distinction is significant because while humanitarian organisations highlight upholding humanitarian principles like neutrality to obtain access and security, local healthcare providers are in a different situation with constraints that can make it impractical, impossible, or even dangerous to uphold neutrality. 'Unlike humanitarian providers … local doctors, nurses and other health workers need not and often cannot be neutral' because they may not be able to avoid taking sides or becoming involved in the politics of conflict.[92] In the review, some documents recorded medical professionals openly taking sides and using their profession for 'activism' or as a 'weapon of the weak', suggesting that the circumstances of war or civil unrest inevitably lead to a politicisation of healthcare.[93] The emphasis on medical impartiality also relates to military health services, which must remain impartial even when

[89] Weissman, *Measuring*, 64.
[90] Dr Sherin Varkey, Interview, 27 January 2017.
[91] Sarah Cotton, Seminar, January 26, 2017; Rubenstein, *Way Forward*.
[92] Rubenstein, *Way Forward*.
[93]Francoise Labat and Anjali Sharma. "Qualitative Study Exploring Surgical Team Members' Perception of Patient Safety in Conflict-Ridden Eastern Democratic Republic of Congo." *BMJ Open* 6, no.4 (2016); Rubenstein, *Way Forward*; Caroline Abu Sa'Da et al. "Attacks on Medical Missions: Overview of a Polymorphous Reality: the Case of Médecins Sans Frontières." *International Review of the Red Cross* 95, no. 890 (2013).

they are politically implicated in the conflict.[94] Ultimately, the loss of neutrality should not reduce healthcare providers' right to carry out their work without interference, instead they should be held to impartiality, as prescribed by the Hippocratic Oath and other medical ethics declarations.[95]

However, healthcare providers operating in conflicts can also face challenges in providing impartial care, highlighting the need for increased training on medical ethics.[96] This relates to the larger need to understand the impact of a conflict on social norms, because ethical issues arising in medical situations in conflict need to be understood in relation to other social norms[97]. If broader social norms are eroded or distorted in conflict, then this may have an impact on medical ethics and practice.

Concepts that may appear familiar to Western practitioners, in particular those relating to medical ethics and IHL, are presumed to be applicable universally, meaning local understandings and practices are not sufficiently taken into account. This again illustrates the functioning of the epistemic community and its specific *rules* depicted in Section 3, keeping certain voices from entering the predominant discourse on AHCC. Ultimately, this not only results in a poor understanding of motivations, patterns and trends, but it may even lead to unintended consequences.

6 UNINTENDED CONSEQUENCES

The research and advocacy campaigns on AHCC have been celebrated for successfully raising awareness amongst policy makers and the public.[98] As part of the dominant discourse, these campaigns have been productive: generating attention, policy space, and a number of global governance efforts such as UNSCR 2286. However, in serving as a response to AHCC, these campaigns also contribute to an attention economy that treats visibility as a goal in its own right, without advocating for concrete steps to take action. Furthermore, these campaigns remain reliant on the weak and incomplete evidence base, meaning that they promote a representation of AHCC that may not reflect reality.

While the purpose of attention-generation efforts is admirable, the recognition they have produced can be read in a number of ways. Similar to the problem of establishing trends and patterns, it is not possible to measure the impact of advocacy campaigns without baseline data and distinguishing between evidence produced for advocacy objectives versus analysis aims.[99] Thus, rather than treating increased awareness as synonymous with understanding AHCC, deeper analytical attention is needed. Significantly, the discourse also has the potential to

[94] Clark, *Clinics*.
[95] Rubenstein, *Way Forward*.
[96] Vivienne Nathanson, "Medical Ethics in Peacetime and Wartime: The Case for a Better Understanding." *International Review of the Red Cross* 95, no. 889 (2013)
[97] Dr Sherin Varkey, Interview, 27 January 2017.
[98] SHCC, *No Protection*; Leonard Rubenstein, Interview, 19 January 2017.
[99] Weissman, *Measuring*.

produce detrimental effects resulting from the dominant and isolated focus that the issue has received.

6.1 CONFLATING ANALYTICAL OBJECTIVES WITH ADVOCACY AIMS

Although the problematic nature of methodologies and data collection is widely acknowledged, many sources, including some INGOs and academics, continue to use unreliable statistics to make advocacy claims. The continued emphasis on (incomplete) quantitative data with weak analytical potential, as opposed to increasing qualitative data through contextual and comprehensive approaches, illustrates how evidence production is driven by political and funding agendas that require measurable figures.

As a result, quantitative data about AHCC is interpreted in a way that upholds assumptions. This approach risks producing misconceptions by failing to engage in critical analysis or theorising to better understand the drivers or trends of AHCC. In the rapid review, only 35% of documents engaged in some form of theorising, with a mere 8% of documents engaging in substantial (50% or more) theorising. Of the limited documents engaging in this level of theorising, all were analysis documents by academic sources (64%) or humanitarian organisations (36%). Beyond this general paucity of theorising, the review reveals a propensity to make advocacy claims about trends and patterns regardless of lacking the rigorous evidence base or theoretical understanding to back the claims up. For example, 62% of advocacy documents do not engage in theorising. Weissman observed a similar tendency in advocacy efforts claiming an increase in humanitarian insecurity.[100] He cautions that activists' interpretation of ambiguous data to confirm increasing danger can actually produce misleading claims and divert attention from developing historicised and contextualised understandings of particular attacks.[101] Similarly, documents in the review aggregate global data and despite acknowledging a weak evidence base, go on to claim increasing trends of AHCC. In their annual report, SHCC rejects quantifying global attacks due to the lack of systematic documentation, but at the same time claims that 'in recent years, attacks on health care services have escalated.'[102] This illustrates how a reliance on the weak evidence base and an inclination towards generating attention can exacerbate the discrepancy between what is covered in the dominant discourse versus the reality on the ground.

6.2 SIMPLE NARRATIVES

The above-mentioned discrepancy connects to the humanitarian emergency imaginary and the use of a simplistic narrative to generate attention.[103] While this is an understandable logic for

[100] Ibid.
[101] Ibid.
[102] SHCC, *No Protection, 14.*
[103] Calhoun, *Idea of Emergency*.

making complex conflicts easier to understand and create consensus around, it significantly reduces the opportunity for understanding.

The emergency imaginary can influence the evidence base in multiple ways. First, despite acknowledging the lack of reliable evidence, campaigns and organisations may continue making sensational claims to attract attention. Second, due to under-documentation of attacks, reports may include data from the media (despite its varying reliability).[104] Third, even when documents establish broader definitions of AHCC, the concept is often reduced again through its operationalisation. Many reports revert to particular forms of attacks, such as variations of bombing that result in high mortality, which narrows the focus and can exclude or normalise other forms of attacks.

6.3 EXCEPTIONALISM AND SILENCING

The research revealed that particular forms and regions of AHCC are presented as exceptional, which produces hierarchies of attacks and obscures AHCC relation to the continuum of conflict violence. This can have multiple harmful implications.

First, it can create an unfounded presumption that similar attacks will not be replicated in other conflicts. Mayday described how a current 'tendency to talk about Syria in exceptionalist terms' has promoted a portrayal of certain forms and levels of violence being exclusive to Syria. Furthermore, while AHCC began receiving more international policy interest since 2011, it was not until 2014/15 when attacks in Syria gained mainstream public attention that the AHCC discourse gained its current dominance. While the immense level (quantity and severity) of AHCC in Syria is recognized, it should not diminish the significance of attacks elsewhere. The review revealed that 80% of *global* documents have a Syrian focus and over 31% of reported *intentional* attacks are from Syria. The effect of this 'exceptionalism' is illustrated once Syria is removed from the sample: only 18% of the remaining documents in the review mention aerial attacks as a form of violence (mostly about Palestine) as opposed to over 60% with Syria. Therefore, the appearance of general trends can actually be the result of predominant coverage on a particular region or incidents.

Second, other forms of violations might become normalised. When AHCC are denounced as particularly reprehensible, it may create a sense of normalcy or acceptance around other attacks on civilian spaces. While particular regions and forms of attacks have been privileged, others have received less coverage. There is consensus that despite the rise to prominence of AHCC, space across global platforms remains limited.[105] Health crises and protracted conflicts vying for recognition in the Western media and international policy space face a crowded environment and compete for attention. For example, AHCC in Yemen[106] and South Sudan have typically received less attention, despite documentation of a high quantity of attacks in

[104] SHCC, *No Protection*; Hussam Wafa Issa and Moss, D., Interview, 31 January 2017.
[105] Seminar, Chatham House, January 26, 2017.
[106] The rapid review indicates that recently Yemen has received more attention.

both countries. UN reports estimate the number of people lacking sufficient healthcare is 14.1 million in Yemen as opposed to 11.5 million in Syria.[107] Furthermore, in 2014, an already narrow global media space was consumed with crises such as Gaza and the Ebola epidemic. While the focus was understandable, this also further limited the ability to draw attention to pervasive violence against healthcare in, for example, South Sudan and CAR.[108]

Third, representing particular forms of attacks as more notable might silence other forms and contexts. As previously mentioned, the review extracted only one local NGO and one local media source. Language limitation and databases acknowledged, this still represents an incredible absence of local voices in the dominant discourse. One could argue that the *rules* within the discourse dictate the language and inclusion of a certain type of data from certain sources and thereby exclude, unintentionally, local actors. Silencing may be exacerbated by political concerns around some conflicts, for example the controversial involvement of the UK and USA in Yemen by supplying weapons to the Saudi-led coalition. Similarly, geopolitical concerns are likely to accentuate the focus on Syria, by directing Western attention to Russia's involvement and the potential for AHCC to contribute to the refugee crisis. This merging of AHCC and geopolitics provides liberal media with a consumable entry point into the issue, which generates additional attention. In this way, coverage remains based on *appetite* rather than a reflection of incidents happening in reality.[109] While this attention economy within media coverage is well documented and can be expected, it is important to consider the impact it can have on silencing or normalising less prominent forms AHCC or attacks on civilian spaces.

6.4 CONVERTING GLOBAL ATTENTION INTO AN INSURGENCY INCENTIVE STRUCTURE?

This exceptionalist treatment may also create a perverse incentive structure that encourages armed actors seeking global attention to engage in AHCC. There has been theorising in conflict studies on the possibility of insurgent groups using forms of organised violence that attract high international attention, as a viable path to gain a share of state power, through inclusion in unity governments and power sharing agreements.[110] Conceptualising the possibility of external actors' dominant discourse denouncing particular forms of violence to impact the calculations of non-state warring insurgents seeking to gain a share of state power, may be relevant to certain uses of AHCC.

This theory has been applied across cases where insurgent leaders have surpassed a certain threshold of military strength or executed violence and were then included in power-sharing

[107] SHCC, *No Protection*, 11.
[108] Jo Kuper, Seminar, January 26, 2017.
[109] Sarah Cotton, Seminar, January 26, 2017.
[110] Dennis M. Tull and Andreas Mehler. "The Hidden Costs of Power-Sharing: Reproducing Insurgent Violence in Africa." *African Affairs* 104, no. 416 (2005)

agreements.[111] Because inclusion is dependent on gaining global attention, particular forms of internationally condemned, 'exceptional' violence may be exploited by insurgent groups as a method to draw attention from the international community and increase pressure on their inclusion in negotiations with the government. While this theory may not hold in cases where AHCC are perpetrated by state forces, it may serve as a driving factor behind attacks launched by insurgent groups. The potential of the dominant discourse denouncing AHCC to create incentives for insurgent groups to exploit this form of attack as a bargaining tool deserves further examination.

6.5 POLITICS OF REPORTING

While acknowledging the need for more data collection, in some cases reporting AHCC may put informants at greater risk for intimidation, threats, or obstruction. There is a varying degree of concern attached to reporting AHCC across different contexts and informants. Fear and intimidation around reporting appears to be particularly strong when the state or other hegemonic powers are perpetrating the attacks and have the political power to refute reports or levy repercussions against the claimants.[112] For example, Palestinians living in the West Bank or Gaza Strip fear documenting or filing complaints about AHCC because of possible repercussions, including delays or denials of permits needed to travel across the border. These repercussions can exacerbate violence against healthcare by blocking Palestinian doctors or patients from traveling to Jerusalem for work or seeking medical treatment.[113]

The danger associated with reporting attacks can leave communities and healthcare providers trapped between the danger of unaccountability and the threat of repercussions for reporting. Furthermore, this insecurity can exacerbate the deficit of local voices in the dominant discourse. Thus, the danger related to reporting carries a double burden, because local providers are often the only people to witness or have access to areas under attack.[114] Therefore, the development of systematic data collection systems and methodologies must heed requirements for the protection of those reporting.

The potential for unintended consequences illuminates the need for greater theorising to better understand AHCC and promote more effective responses that minimise the risk of unexpected drawbacks or perverse results.

[111] Dennis M. Tull and Andreas Mehler. "The Hidden Costs of Power-Sharing: Reproducing Insurgent Violence in Africa." *African Affairs* 104, no. 416 (2005); Severine Autesserre. "Dangerous Tales: Dominant Narratives on the Congo and Their Unintended Consequences." *African Affairs* 111, no. 443 (2012); Laura Heaton. "The Risks of Instrumentalizing the Narrative on Sexual Violence in the DRC: Neglected Needs and Unintended Consequences." *International Review of the Red Cross* 96, no. 894 (2014).
[112] James Le Mesurier, Interview, 11 January 2017.
[113] Hussam Wafa Issa and Moss, D., Interview, 31 January 2017.
[114] James Orbinski, et al. "Violations of Human Rights: Health Practitioners as Witnesses." *The Lancet* 370 (2007).

CONCLUSIONS

The increased international attention on AHCC by humanitarian actors, media, and academics has produced a number of successful campaigns and global governance efforts denouncing these attacks. However, beyond attention-generation, an optimal evidence base is needed to support informed and effective responses and interventions to AHCC. The most evident strengths are: (1) the use of qualitative data to complement statistics, (2) attempts to contextualise AHCC to enable theorising around drivers, and (3) the multiple actors (especially local) already collecting data provides opportunity for collaboration and complementarity. However, there are substantial, prevailing weaknesses in the evidence base that have enabled the discourse on AHCC to produce knowledge and claims about this issue that may not reflect the complex reality. Particularly concerning are: (1) the lack of comparability between sources due to the lack of a common taxonomy, (2) the quantifying of qualitative data without disaggregation, and (3) the manipulation of contextualised data to make global claims.

This evaluation suggests that the weaknesses and gaps in data collection and the AHCC evidence base require attention. Continued work to strengthen the collecting and disseminating of systematic, comprehensive data must be a priority. Furthermore, a stronger evidence base is needed for advancing multidisciplinary, contextualised research that can play a central role in providing a better understanding and more effective response, intervention, and protection efforts. Based on these findings, the research team elaborated a set of recommendations for Chatham House in the following section.

RECOMMENDATIONS

1) Support the WHO to institutionalise systematic and comprehensive standards for data collection on AHCC. In addition, encourage the WHO to use their convening power to increase cooperation within the health-security network to harmonise and enable comparison across a breadth of perspectives.

a) Support the WHO's leadership role in producing and promoting systematic, comprehensive mechanisms for collecting and disseminating data on AHCC, including a common taxonomy of classifications and methodologies.

- Ensure a common and objective taxonomy of classifications and methodologies is promoted. This taxonomy must balance explicit standards for definitions and methodologies with enough disaggregated data and flexibility to allow for diversity of contextualized reporting methods and varying research objectives.
- Maintain efforts to expand the conception of AHCC to ensure a full breadth of attacks and violence (as provided for through IHL and WHO's definition) are documented and studied. Encourage data collection and research to recognise the full breadth of AHCC, rather than privileging particular forms of physical attacks.

- Promote collaboration and the potential for cross-discipline analysis and learning to support the accumulation and sharing of lessons learned and best practices.

b) Promote and clarify the incorporation of present research findings in reporting mechanisms to advance systematic analysis of the short- and long-term impacts of AHCC.

- Ensure that consideration for the safety of data collectors is built into the design and implementation of data collection mechanisms. Attention must be given to developing and using trusted methods to enable data collection without increased fear or risk of physical attack or obstruction in retaliation. These considerations must extend beyond humanitarian actors to include the fear and threat of repercussions faced by local healthcare workers and communities.
- Encourage new collaborations and further research on the potential role of technologies in facilitating and supporting safer and reliable reporting. Further collaboration with organisations in the technology sector can explore, *what is the potential of open source platforms and what are the risks associated with such methods of data collection?* Suggestions for potential partners for such collaboration can be found in Appendix 11.
- Bring attention to the importance of balancing attention-generation efforts with the risk of unintended consequences; analysis of risks should pay particular attention to the potential for adverse consequences such as insecurity for data collectors. Future research should explore *in what ways can common data collection mechanisms for AHCC adapt best practices from other sectoral models (such as security databases and human rights reporting mechanisms) to manage security risks for data collectors?* See a summary of other data collection mechanisms in Appendix 9.

2. Promote the establishment of regionalised research consortiums to facilitate multidisciplinary collaboration and enable contextualised exploration and analysis of trends, patterns, and motivations in AHCC, which can support optimal responses and policy prescriptions.

a) Promote contextualised, multidisciplinary research to address the need for deeper analytical and theoretical research on trends, patterns, and motivations.

- Initiate multidisciplinary research that brings together combinations of researchers from across sectors (humanitarian, academic, think tanks, and policy) and academic fields (health, humanitarian, security, law, and conflict studies).
- Implement thematic research to identify and analyse trends, patterns, and relationships. Further research should explore *to what extent can grouping types of AHCC based on similarities across region, warfare type, or fighting modalities illuminate trends or patterns in AHCC? To what extent can patterns in the use of obstruction be detected by comparing state and non-state armed actors' tactics?*

- Address gaps in understanding motivations. Recognising the difficulty of legally establishing intent, multidisciplinary research between social science academics and humanitarian practitioners provides an alternative to identify motivations, combining qualitative and quantitative field level research to inform prevention approaches. In this area, research should explore *to what extent can multidisciplinary research combine theoretical insights with empirical evidence to identify indicators for intentionality?*

b) Convene regular roundtables with stakeholders from affected regions to capitalise on regional hubs and contextualised research

- Promote involvement of stakeholders from affected regions in research and policy debates to address the neglect of local voices in the AHCC evidence base. Establish strategic links between national, regional and global stakeholders (academic, humanitarian, security, and policy) to develop regional hubs where issues can be contextualized and actioned with researchers from affected regions.
- Encourage these regional hubs to tackle policy issues raised by the contextualised research on the impact and drivers of AHCC. Various stakeholders' authority should be leveraged in relevant national and global policy spaces to promote active policy prescriptions that address the impact, prevention, and mitigation of AHCC.

3. Include AHCC in Chatham House's promotion of global health security as a featured issue at the Munich Security Conference and MSC Core Group Meetings.

a) Recognise AHCC as part of the health-security nexus

- The short and long term impact of AHCC on devastating health systems and obstructing populations' access to healthcare in conflict should be recognised as a pressing factor contributing to the risk of future pandemics and public health crises.

b) Use panel discussions to highlight AHCC as a key security threat in the global health and security system

- The ability to better understand, document, address, and prevent AHCC is significant to regional and global efforts to mitigate health security risks and uphold global stability and security.

4. Support objective enquiries to explore barriers to achieving and compliance with UNSC 2286 by the United Kingdom.

a) Identify the barriers

- There is a need to identify the barriers that prevent or hinder uptake and compliance with UNSC 2286.

b) Convene roundtables

- Different stakeholders engaged in the AHCC issue and debate in the UK should be convened to explore causes and influencers of the lack of compliance and establish recommendations.

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Preeti Patel, King's College London, Expert Seminar, January 26, 2017

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APPENDICES

APPENDIX 1: TERMS OF REFERENCE

Chatham House / MSF Consultancy Project
Health Care Under Fire: The New Normal?
Terms of Reference

Objective

Inform future research and policy debate in the area of medical neutrality and the protection of patients, medical space and staff in conflict settings through analytical research that explores the existing body of evidence on attacks on healthcare and medical neutrality in conflict and its ability to establish patterns, nature of violations and wider social and political dynamics that surround them.

Background and Rationale

Although the phenomenon of 'health care under fire' is not a new one and attacks on medical facilities have been reported in multiple conflicts since the implementation of the Geneva Conventions, the current state of affairs in Syria, as well as Yemen, Afghanistan and South Sudan, have attracted more public attention and sparked outrage among the humanitarian community about the sheer atrocity of the perpetrations as blatant violations of the rules of war.

While several projects have been launched in recent years with aims of analysing attacks to inform wider advocacy action and agency specific security and programming approaches[115], there is a gap in current research that brings the data together with historical, social and political analysis of contexts, drawing trends and patterns that can expose motivations and the various forms attacks take on. In short, identifying and analysing violence, it's motivations and violent acts in relation to understandings (perceived or real) of medical space and medical neutrality in practice. The UN Resolution 2286, in 2016 and the launch of research programmes by international organisations are the first steps into this direction, but they have not deployed a standardised method of reporting the attacks which would allow to draw taxonomy of patterns in the targeting of medical space and staff during armed conflict. The aim of the project is therefore to produce exploratory research to inform further investigation and understanding to help mitigate or prevent such attacks in the future.

Research Question

To what extent can the existing database on attacks on healthcare (including attacks and

[115] Such as the Safeguarding Health in Conflict Coalition, The ICRC's 'Health Care in Danger' and MSF's 'Medical Care under Fire'.

threats to physical space, ideological space, practice) and medical neutrality be combined (across data/information sources), validated (assessing quality, credibility, and reliability), and be used to corroborate further academic and policy oriented research?

Methodology

The consultants will undertake a literature review and desk research using existing data sets and definitions to conceptualise whether it's possible to derive patterns of abuse of medical neutrality.
Semi-structured interviews with key informants and focus group discussions with practitioners and academics will also be used for both primary research and collaborative analysis.

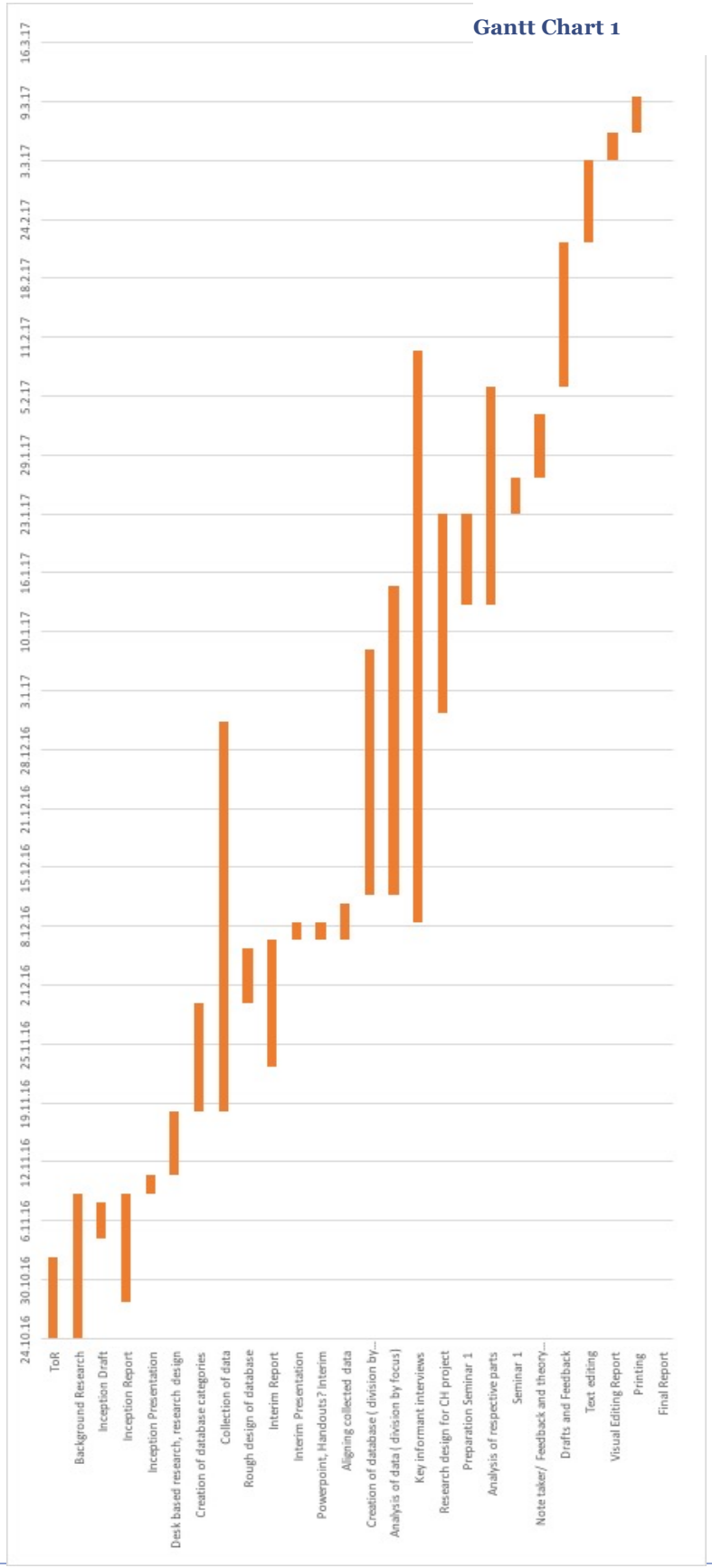
Deliverables

- 2-page Inception Report - 7th December, 2016
- Report (12,000 word) - 10th March, 2017
- Presentation at Chatham House - 16th March, 2017

Consultancy Group Responsibilities

- Client Liaison: Emma Tuck
- Editor-In-Chief: Heather Zimmerman
- Project Management: Michelle Mülhausen

Gantt Chart 1



APPENDIX 2: RAPID REVIEW DESIGN

Research Objective

To examine and assess the existing body of evidence on attacks on healthcare and medical neutrality in conflict settings to inform future academic, field, and policy work to promote behaviour change and reduce attacks on and threats to medical space and neutrality. This includes considering how attacks on healthcare fit into the conflict political economy, the relationship between conflict and humanitarian norms and standard operating procedures, and whether healthcare provision is actually recognised as neutral by different conflict stakeholders.

Research Question and sub-questions

To what extent can the existing database on attacks on healthcare (including attacks and threats to physical space, ideological space, practice) and medical neutrality be combined (across data/information sources), validated (assessing quality, credibility, and reliability), and be used to corroborate further academic and policy oriented research?

- To what extent does the quality of the current body of data, with particular consideration of varying epistemological biases and objectives, provide a rigorous foundation for future academic and policy research?
- Can analysis of data sources and their temporal spread provide sufficient evidence to construct a baseline?
- Can trends and categories in attacks be drawn from existing data on attacks on healthcare in conflict settings to produce an evidence base for further research into theories and motivations of attacks?
- To what extent has the international humanitarian discourse informed the existing body of evidence and set medical attacks as a priority?

Planning and Developing the Rapid Review: meta-study of existing evidence body

The consultancy group is planning and developing a systematic and replicable rapid review of existing data/information of attacks on healthcare and medical neutrality in conflict settings. This includes identifying data/information from across regional perspectives (Western/non-Western) and disciplines (humanitarian organisations, media (commercial, state, and social), political actors, warring parties, international fact checking databases, etc.). Additionally, longitudinal data will be sought to identify how far back data can be traced and what (if any) baseline can be drawn and comparing how this corresponds with the genealogy of international humanitarian discourse surrounding the issue.

The rapid review focuses on evidence from three broad categories of sources: (1) academic; (2) media and press; and (3) humanitarian grey literature. The identification and documentation of relevant evidence from each source in the review process is twofold:

- **Rapid Review:** Database oriented search strategy covering all three categories
- **Peer Review**: Key humanitarian documents selected by project clients

Developing a Search Strategy:
The development of an effective search strategy was essential to ensure a comprehensive and relevant result for the rapid review. Developing the search strategy consisted of the following steps:

1. Formulation of the research question
2. Identification and justification of research scope, balancing breadth and depth concerns with time constraints
3. Identification / selection of most relevant databases
4. Identification of key concepts within the question
5. Identification of search terms to describe those concepts
6. Consideration of synonyms and variations of those terms
7. Preparation of the search logic / search string; including trial and error process
8. Establishment of justifiable parameters of the search

Selection of the databases to be analysed:
Databases were selected based on a review of existing systematic reviews from credible and relevant organisations covering similar topics and supported by the LSE Librarian service. Databases identified cover Social Science, Medical/ Health, Media, Law and Humanitarian sources.

Review databases include:

1. Health: Pubmed
2. Social Science / Academic: CABI Global Health, IBSS, Web of Science
3. Media: Nexis
4. Humanitarian: Reliefweb

Identification of key concepts:
Based on the research questions (agreed with the client), two core concepts were identified:

- **Attacks on healthcare in conflict**: attacks on healthcare workers; security, violence and health in conflict; violence on hospitals in conflict; attacks and violence on medical facilities/workers.
- **Medical neutrality in conflict settings:** medical ethics in conflict zones; humanitarian space; neutrality and IHL; healthcare in the Geneva Convention

Identification of key search terms and synonyms
Based on the core concepts, key terms and synonyms were identified to ensure that a systematic research process can be operationalized and that the search string captures all possible relevant results. Synonyms were triangulated and tested for appropriateness with relevant documents, database key words, and the research question. Synonym lists are included in annex 1.

Preparation of the search string:

Search strings were created for the two core concepts and tested with trial and error on the search engines and crosschecked with academic advice for their relevance, functioning, and appropriateness to achieve the desired results. Examples of main search strings for each concept are included in Appendix 2.
Additional filters that define the scope of the project include:

- Timeframe: Published since 01/01/2011
- Language: English, French, German, Arabic.

Identifying appropriate research systems for data coding and analysis
The consultancy project is using Mendeley as an online reference management system to supervise the collection of evidence from across databases. Mendeley will be used to organize, store, tag, and share documents identified through the filtering process from the rapid review for analysis, as well as for the bibliography and citation support in the final report.

The consultancy group has produced a comprehensive database (Appendix 3) with categories based on the research question and related core concepts. The database, which was made on excel and is stored on Google drive, supports data collation and analysis. Using Google drive allows all group members to work simultaneously within a shared database, however once data collection is finalised the database will be exported back into excel where more functions can be used to code and analyse the data.

Assessing the quality, credibility, and reliability of the existing evidence body
The consultancy group is remaining attentive to different methodologies and epistemological foundations of different data/information sources (as well as remaining reflexive of our own epistemological perspective, both towards the data and the sources, throughout). We defined the following assessment and analytical categories as:

Validity was defined as a 'contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects'.[116] The research judged both internal and external validity of documents. Internal validity was established through the consideration of additional factors (such as conflict analysis) and the rigour of its methodology. External validity was established through the extent to which data and findings could be compared and replicated across multiple contexts.

Rigour was defined as 'systematic and self-conscious research design, data collection, interpretation, and communication' that includes clear documentation to allow for replication and 'plausible and coherent explanation of the phenomenon under scrutiny'.[117]

[116] Winter (2000: 1).
[117] Mays, N., & Pope, C. (1995: 110); Barbour, *Checklists*.

Compatibility was defined as the ability for two or more documents to be combined without conflicting claims, statements, facts, or statistics. This was addressed through comparisons of methodology, secondary sources, and definitions.

Quality was established by having been through a process of rigorous and systematic analysis, including rigid documentation.

Theorising was judged based on the depth and volume of analysis, the application of a theoretical framework, and the author's willingness to go beyond description and engage in analytical theorising on drivers and causal relationships of AHCC.

Inclusion/exclusion criteria

The following inclusion criteria were used in the filtering process for this review:

- Time frame: Only studies and articles published after 1/1/2011 will be selected. This date was chosen based on conflict timelines and a manageable scope of data based on the research project's timeframe.
- Types of studies: Primary and secondary qualitative and quantitative published studies will be included. In studies using secondary data, the sources of data drawn from will be recorded to establish trends and greater understanding of what primary data sources are driving global reporting.
- Populations of interest: medical providers, staff of medical and humanitarian organisations, populations, and stakeholders in contemporary (2011-2016) armed conflict zones.
- Geographic focus: countries and places that are currently affected by armed conflict.
- End-user focus: in both searches we only included data that provided client relevance (determined through research objective and question) or provided or referenced primary or local level empirical data.
- Attack phase: Studies that cover threats, physical attacks and/or raids, and violations on healthcare (including medical space, personnel, facilities, or vehicles)
- Language: English, French, German, Arabic

Key term synonyms

Examples of key term synonyms include:

Synonyms Facilities: hospital, clinic, medical building, healthcare facility / building, facility, infirmary, health facility, ward, military hospital, emergency room, operating theatre / room, surgery, medical clinic, healthcare clinic, medical facility, ambulance, medical space, healthcare,

Synonyms War: war, conflict, conflict zone, armed conflict, conflict affected zone, civil war, insurgency, combat, fighting, hostility, terrorism, terror, warfare, battle, war-torn,

Synonyms Personnel: medical personnel, medical staff, physician, doctor, paramedic, healthcare professional, nurse, medical specialist, healthcare provider, care provider, health care personnel, medical experts, health experts, healer, medic, therapist, medical practitioner, ambulance driver, health worker, surgeon, clinical staff, medical provider.

Synonyms Attack: Attack, Abuse, Incident, security incident, Threat, Violence, Physical assault, Assault, Strike, Violation, Offense, Aggression, Raid, Defilement, Occupy, Harass, Onslaught, siege, airstrike, bombing, looting, bombing campaign, harm, targeting

Search strings
The search strings used for the two core concepts:

Concept 1: TS=("healthcare" OR "medical facility" OR "medical space" OR "health facility" OR "health worker" OR "medical staff" OR "healthcare provider" OR "clinical staff" OR "health worker" OR "health in conflict") AND TS=("under attack" OR abuse OR threat OR violence OR violation OR bombing OR looting OR targeting OR "security incident" OR strike OR raid OR siege OR airstrike) AND TS=(conflict OR war OR "conflict zone" OR "armed conflict")

Concept 2: ((violation OR breach OR disrespect OR "lack of respect") AND ("medical neutrality" OR healthcare)) OR ((violation OR breach OR disrespect OR "lack of respect") AND (IHL OR humanitarian law OR Geneva Conventions AND healthcare)
Search strings were adapted to the databases according to their coding and relevance of wording.

APPENDIX 3: RAPID REVIEW SEARCH RESULTS

Database driven search: search string 1	**Database**	**#Hits**	**#Meets Criteria**
	PubMed	52	17
	Web of Science	82	15
	IBSS	674	17 (of 500)
	CAB Global Health	41	11
	ReliefWeb	98	24
	Nexis	3,000+	383 (of 500)
	Total	3,947	467
Database driven search: search string 2	**Database**	**#Hits**	**#Meets Criteria**
	PubMed	6	5
	Web of Science	6	3 (2 without access)
	IBSS	0	0
	CAB Global Health	0	0
	ReliefWeb	140	20
	Nexis	304	50
	Total	456	78
Peer-Review		Of 41 references provided, 28 were new references	28
Total before filtering process			573
Total after filtering process			**131**

APPENDIX 4: LIST OF DOCUMENTS IN DATABASE

Type	Date	Source (Author / Organisation)	Title
Academic	2015	Sherine Hamdy, Soha Bayoumi	Egypt's Popular Uprising and the Stake of Medical Neutrality
Academic	2016	Emma Varley	Abandonments, Solidarities and Logics of Care: Hospitals as Sites of Sectarian Conflict Gilgit-Baltistan
Academic	2016	Melania Borgo, Mario Picozzi	The Separation Wall and the right to healthcare
Academic	2013	Samrat Sinha et. Al	Vulnerabilities of Local Healthcare Providers in Complex Emergencies: Findings from the Manipur Micro-level Insurgency Database 2008-2009
Academic	2015	Salih Can Aciksoz	Medical Humanitarianism Under Atmospheric Violence: Health Professionals in the 2013 Gezi Protests in Turkey
Academic	2016	Preeti Patel et al, King's College London	Documenting attacks on health workers and facilities in armed conflicts -
Academic	2016	Francoise Labat, Anjali Sharma	Qualitative study exploring surgical team members' perception of patient safety in conflict-ridden Eastern Democratic Republic of Congo
Academic	2014	Rachel Irwin, SIPRI	Violence against Health Workers in Complex Security Environments
Academic	2015	Ron J. Smith	Healthcare under siege: Geopolitics of medical service provision in the Gaza Strip
Academic	2014	Katherine H.A. Footer, Sarah Meyer Et Al.	On the frontline of eastern Burma's chronic conflict - Listening to the voices of local health workers
Academic	2013	Leonard S.	A way forward in protecting health services in conflict:

		Rubenstein	moving beyond the humanitarian paradigm
Academic	2012	Samrat Sinha, Nobhojit Roy	Healthcare workers in conflict zones - fright or flight?
Academic	2014	Justine Namakula, Sophie Witter	Living through conflict and post-conflict: experiences of health workers in northern Uganda and lessons for people-centred health systems
Academic	2011	Ruchama Marton	Human rights violations during Israel's attack on the Gaza strip: 27 December 2008 to 19 January 2009
Academic	2015	Primus Che Chi et. Al	Perceptions of the effects of armed conflict on maternal and reproductive health services and outcomes in Burundi and Northern Uganda: a qualitative study
Academic	2011	Cindy Sousa and Amy Hagopian	Conflict, health care and professional perseverance: A qualitative study in the West Bank
Academic	2013	Pavignani, Michael, Murru et Al.	Making sense of apparent chaos: health-care provision in six country case studies
Academic	2013	Katherine Footer & Leonard Rubenstein	A human rights approach to care in conflict
Academic	2013	Amrei Müller	States' obligations to mitigate the direct and indirect health consequences of non-international armed conflicts: complementarity of IHL and the right to health
Academic	2013	Vivienne Nathanson, BMJ	Medical ethics in peacetime and wartime: the case for a better understanding
Academic	2016	Adia Benton, Sa'ed Atshan	"Even War has Rules": On Medical Neutrality and Legitimate Non-violence
Academic	2016	The Lancet Global Health	Medical neutrality: resetting the moral compass
Academic	2014	Nehad Khader	Quick Death under Fire , Slow Death under Siege

Academic		Vivienne Nathanson, BMJ	Delivering healthcare in situations of conflict or violence: The International Committee of the Red Cross sets out how to do it
Authorities	2014	DFID	UK activates £3 million Rapid Response Facility for Gaza
Authorities	2016	US State Department	Joint Statement on the Affirmation of the Importance of and Adherence to International Humanitarian Law Issued at the World Humanitarian Summit, Istanbul, Turkey
ICRC	2013	ICRC	Violent Incidents Affecting Health Care - HEALTH CARE IN DANGER
ICRC	2011	ICRC	A sixteen-country study - Health care in Danger
ICRC	2013	ICRC, Linares and Chau	Reflections on the Colombian case law on the protection of medical personnel against punishment
ICRC	2013	ICRC	The relevance of the Fundamental Principles to operations: learning from Lebanon
ICRC	2013	ICRC	The Vukovar Hospital case from the perspective of a national investigative judge
ICRC	2013	ICRC	ICRC and World Medical Association to work together for safer health-care delivery
ICRC	2013	ICRC	Attacks on medical missions: overview of a polymorphous reality: the case of Médecins Sans Frontières
ICRC	2013	ICRC	In conversation with Pierre Gentile, Head of Project 'Health Care in Danger', ICRC Directorate of Operations
ICRC	2013	Vincent Bernard, IRRC	Editorial: Violence against health care – Giving in is not an option
ICRC	2013	ICRC, Fiona Terry, independent researcher	Violence against health care: insights from Afghanistan, Somalia, and the Democratic Republic of the Congo

ICRC	2013	ICRC, Pedram Yazdi and Varney Bawn, delegation in Liberia	Interview with Walter T. Gwenigale
ICRC	2013	ICRC, Robin Coupland	The role of health-related data in promoting the security of healthcare in armed conflict and other emergencies
ICRC	2013	ICRC, Marisela Silva Chau and Ekaterina Ortiz Linares	In conversation with the members of the National Permanent Roundtable for the Respect of the Medical Mission in Colombia
ICRC	2013	ICRC, Alexander Breitegger	The legal framework applicable to insecurity and violence affecting the delivery of health care in armed conflicts and other emergencies
ICRC	2013	ICRC, Laurent Gisel	Can the incidental killing of military doctors never be excessive?
ICRC	2016	ICRC, Dr. Theophilus Odagme,	Working towards safer access to health care in Rivers state
ICRC	2011	ICRC	Health Care in Danger: Making the case
NGO	2015	Medecins Sans Frontieres	Aleppo: Medical Aid Besieged From Medical Care under Fire to the Near Impossibility of Humanitarian Action
NGO	2014	Medecins Sans Frontieres	Tripoli's fragmented health care: Consequences of fighting on the provision of medical assistance
NGO	2014	Medecins Sans Frontieres	The Impact of MSF's withdrawal from Somalia in 2013
NGO	2016	Medecins Sans Frontieres	Review of Attack on Al Quds hospital in Aleppo City
NGO	2014	Medecins Sans	South Sudan Conflict; Violence Against Healthcare

		Frontieres	
NGO	2016	Medecins Sans Frontieres	Patient Care in Yemen Endangered by Violence – The MSF Experience in Yemen
NGO	2014	Medecins Sans Frontieres	"No patients, no problems" Exposure to risk of medical personnel working in MSF projects in Yemen's governorate of Amran
NGO	2016	Medecins Sans Frontieres	MSF internal review of the February 2016 attack on the Malakal Protection of Civilians Site and the post-event situation
NGO	2016	Medecins Sans Frontieres	Syria 2015: Documenting war- wounded and war-dead in MSF- supported medical facilities in Syria
NGO	2016	Medecins Sans Frontieres	Changes in Medical practices in Syria.
NGO	2015	Medecins Sans Frontieres	Syria: Hospitals Struggle to Cope with Shelling in Besieged Areas
NGO	2015	Medecins Sans Frontieres	Deadly double-tap bombing on MSF-supported hospital in Syria partially destroys facility
NGO	2016	Medecins Sans Frontieres	Syria: At least 11 killed in another MSF-supported hospital attack in Idlib province Update: Feb 16th
NGO	2016	Medecins Sans Frontieres	Yemen: "Healthcare at breaking point"
NGO	2011	Medecins Sans Frontieres	MSF evacuates over 70 war-wounded by boat from Misrat, Libya
NGO	2016	Safeguarding Health in Conflict Coalition	No Protection, No Respect: Health Workers and Health Facilities Under Attack 2015 and Early 2016

NGO	2015	Physicians for Human Rights	Attacks on Health Care in Syria - Normalizing Violations of Medical Neutrality?
NGO	2011	Physicians for Human Rights	Syria: Attacks on Doctors, Patients, and Hospitals
NGO	2015	Physicians for Human Rights	Aleppo Abandoned A Case Study on Health Care in Syria
NGO	2016	International Council of Nurses	International Council of Nurses Calls on UN Security Council to Adopt Resolution to Protect Healthcare Workers
NGO	2014	Al Mezan Center for Human Rights	Humanitarian situation deteriorate rapidly in Gaza and IOF attacks continue, Al Mezan: Death Toll Reaches 1,440 Palestinians; 79.9% Civilians; 343 Children and 186 Women
NGO	2014	Human Rights Watch	Government Attacking Fallujah Hospital
NGO	2015	Human Rights Watch	Yemen: Warehouse Strike Threatens Aid Delivery
NGO	2015	Human Rights Watch	Sudan: Bombing Campaign's Heavy Toll on Children
NGO	2016	Malteser	Syria: Children's hospital moved to cellar
NGO	2016	Amnesty International	Yemen: Evidence indicates US-made bomb was used in attack on MSF hospital
NGO	2016	Afghanistan Analysts Network	Clinics under fire? Health workers caught up in the Afghan conflict
United Nations	2011	UN Assistance Mission in Afghanistan	United Nations strongly condemns attack on medical facility in Kabul
United Nations	2016	WHO	Report on Attacks on Health Care in Emergencies

United Nations	2014	UNOCHA	Assistant Secretary-General for Humanitarian Affairs and Deputy Emergency Relief Coordinator, Kyung-Wha Kang statement to the Human Rights Council special session on Gaza
United Nations	2014	UN Integrated Regional Information Networks	More Protection for Healthcare Needed
United Nations	2016	UN Security Council	Those Besieging Syrian Cities Know Security Council Unable, Unwilling to Stop Them, Emergency Relief Coordinator Says in Briefing
United Nations	2016	UN General Assembly	Responding to Current Humanitarian Crises, General Assembly Adopts Texts Aimed at Alleviating Suffering of Millions, Protecting Civilians, Aid Workers
United Nations	2014	UNOCHA - ERC	UNDER-SECRETARY-GENERAL FOR HUMANITARIAN AFFAIRS AND EMERGENCY RELIEF COORDINATOR, VALERIE AMOS SECURITY COUNCIL BRIEFING ON SYRIA
United Nations	2015	UN Human Rights Council	Human Rights Council holds interactive dialogue with the Commission of Inquiry on Syria (23/06/15)
United Nations	2016	UN Security Council	Adopting Resolution 2327 (2016), Security Council Grants Mandate Extension of United Nations Mission in South Sudan, Considers Possible Sanctions
United Nations	2015	UN Security Council	Security Council, Alarmed by Depth of Syrian Crisis, Urges Greater International Support to Neighbouring Countries Overwhelmed by Refugees
United Nations	2013	UN Security Council	Briefers Highlight 'Prevailing Disrespect' for International Humanitarian Law as Security Council Considers Protection of Civilians in Armed Conflict
Other	2015	Independent medical fact-finding mission, Jutta Bachmann et al.	Gaza 2014: Findings of an independent medical fact-finding mission

Other	2015	International Criminal Court	The Prosecutor of the International Criminal Court, Fatou Bensouda, requests judges for authorisation to open an investigation into the Situation in Georgia
Press-international	2016	Charlie Cooper	You take out one doctor, you take out 10,000 people'; SYRIA Assad and his allies are targeting healthcare workers, war-zone surgeon David Nott tells Charlie Cooper
Press-international	2014	Unknown	Attacks on healthcare: the growing casualty of war
Press-international	2014	Unknown	More protection for healthcare needed
Press-international	2011	Unknown	Hospitals, medical staff targeted in wards, ICRC says
Press-international	2016	Sputnik	UNSC Adopts Resolution Condemning Attacks on Medical Personnel in War-Torn Countries
Press-international	2016	Matthew Reid (The Dominion Post)	No excuse for attacks on hospitals - even in war zones
Press-international	2012	Jasmine Malone	Nursing in the world's war zones
Press-international	2015	Agence France Presse	Girls raped, boys abducted, towns torched' as South Sudan battle rages
Press-international	2015	Agence France Presse	S.Sudan army advances as UN warns over 650,000 at risk
Press-international	2015	Agence France Presse	South Sudan aid workers shelter from battles in swamps
Press-	2015	Imogen Wall	

internation al			Hospitals and war crimes: a patchy record
Press-internation al	2016	Agence France Presse	Syria army readies Aleppo offensive as civilian toll rises
Press-internation al	2015	Right Vision News	WHO testing new system to help curb attacks against health workers
Press-internation al	2015	Premium Official News	UN begins testing data collection system to help track, curb attacks against health workers
Press-internation al	2015	PANAPRESS - Pan African News Agency	UN: WHO testing data collection system to help track, curb attacks against health workers
Press-internation al	2016	Javier Bardem, actor who cooperates with MSF Medics under Fire	Javier Bardem: Bombing humanitarians is far from humane
Press-internation al	2013	John Heilprin, Associated Press	Red Cross says civilian centers abused in conflict
Press-internation al	2011	Mark Tran, The Guardian	Red Cross brands assaults on medics in conflict zones a 'humanitarian tragedy'
Press-internation al	2014	Alison Caldwell, ABC Premium News	Red Cross surgeon calls for greater security in conflict zones to protect workers, hospitals
Press-internation al	2016	РИА Новости,РИА Н, RIA Novosti, Sputnik	UN Urges Measures to Prevent Violence Against Aid Workers, Hospitals - Statement

Press-international	2016	Charlie Cooper, The Independent	David Nott interview: War surgeon reveals how healthcare workers are being 'systematically' targeted in Syria; 'Healthcare is seen as a weapon -you take out a doctor, you take out 10,000 people they can't care for'
Press-international	2016	Premium Official News	Iraq: Airstrike Hit Clinic, 8 Civilians Died
Press-international	2016	Targeted News Service	Ambassador Sison Issues Remarks by at a UN Security Council Meeting
Press-international	2016	The Guardian	Healthcare in Afghanistan: 'doctors are threatened at gunpoint, even by civilians'; Doctors, nurses and their families are routinely attacked, disrupting the delivery of medical care and putting the healthcare system in danger of collapse
Press-international	2016	States News Service	IRAQ: AIRSTRIKE HITS CLINIC, 8 CIVILIANS DIED ISIS PLACING FIGHTERS IN MEDICAL FACILITIES
Press-international	2015	States News Service	TRACKING ATTACKS ON HEALTH WORKERS DON'T LET THEM GO UNNOTICED
Press-international	2015	India Pharma News	BMA Makes Plea to Stop Violence Against Doctors in Conflict Zones
Press-international	2015	The Age	He pointed a gun at me and shot': How a doctor survived a war zone
Press-international	2013	Press Association Mediapoint	CRISIS' OF HEALTH WORKER ATTACKS
Press-international	2016	Pan African News Agency	UN: UN Security Council demands protection for hospitals, health workers
Press-internation	2016	United Press International	Afghan children's health, educations at risk, U.N. report says

al			
Press-international	2016	India Blooms News Service	Security Council demands protection for hospitals and health workers in conflict zones
Press-international	2011	United Press International	ICRC alarmed by attacks on health workers
Press-international	2011	AP Planner	Red Cross report reveals rise in violence against medics in conflict zones
Press-international	2016	The Independent	You take out one doctor, you take out 10,000 people they can't care for'; David Nott, a surgeon who regularly volunteers in conflict zones, says the world needs to be alerted to the war crime that is the targeting of healthcare workers in Syria The Monday Interview
Press-international	2016	CBC News	Bombing hospitals in Syria 'an actual strategy of war,' human rights group says
Press-international	2016	States News Service	SECURITY COUNCIL ADOPTS RESOLUTION 2286 (2016), STRONGLY CONDEMNING ATTACKS AGAINST MEDICAL FACILITIES, PERSONNEL IN CONFLICT SITUATIONS
Press-international	2013	The Guardian	Healthcare workers in Syria need international protection
Press-international	2015	RIA Novosti	WHO Records Nearly 600 Attacks on Hospitals in Conflict Zones in Past Two Years
Press-international	2015	The Globe and Mail	GENEVA CONVENTIONS; The rules of war demand respect; Canada must reaffirm its support for humanitarian laws meant to protect aid workers and civilians in conflict zones
Press-international	2013	Postmedia Breaking News	Experts To Come Together in Ottawa To Discuss Medical Challenges In Armed Conflict Situations

Press-international	2016	PR Newswire	In Conflict Zones Worldwide, Medical Facilities and Personnel in 19 Countries Are Under Relentless Attack; New report from coalition of more than 30 NGOs shows global pattern of impunity, calls for international accountability for strikes on health care workers and facilities
Press-international	2011	James Gavin, BMJ	Syrian government defies principle of medical neutrality
Press-international	2015	States News Service, Bureau of Population, Refugees, and Migration	Health Needs of Refugees and IDP Children Including Vaccination
Press-international	2015	State News Service.	Working Together To Protect Healthcare; Mr Bassirou Sene, Representative of the Republic of Senegal to the UN,
Press-international	2015	States News Service	WORKING TOGETHER TO PROTECT HEALTH CARE
Press-international	2011	CNN International	U.S. Sends Drone Planes to Libya; McCain Visits Libya; Parents of Detained Journalist Speak Out; Syrian Security Forces Kill 43
Press - local	2013	Yemen Times	With no specific law to protect them, health care workers are at risk

APPENDIX 5: 30-CATEGORY DATABASE

1) Title

2) Type of document:

What is the background of the source publishing the document, affecting what audience it is directed at and the approach taken by the author

Authorities: Any official document published by public authorities, including governments or international organisations other than the UN

NGO

UN

Academic/University: Any author who published the document primarily in his or her academic function and not as member affiliated with any other research institution, think tank or public function.

ICRC

Press - local: Any press source which was aimed primarily at a local audience (even if not published in the official language spoken in that region), including English language local newspapers or branches of local newspapers in English

Press - international: Any press source retrieved through the search string (which was in English) with a global reach, thus not primarily concerned about local events or about informing a broader audience of local events

Social media

Other

3) Source (author)

Name of the author and organisation if affiliated to any specific

4) Weblink

5) Date of release

6) Country of report origin

7) Location of attacks (country and region)

8) Epistemology (objective):

A ***report*** was considered any document entailing a descriptive presentation of facts

An ***advocacy document*** was considered any document making a particular claim followed by a call for action or a particular policy

A ***press release*** was any press document providing a concise summary that did not engage in profound analysis of the topic or any attempt of theorising around AHCC

An ***article*** was a more detailed description of the topic including background information and a number of different arguments

A ***statement*** was considered any official declaration or statement issued by an organisation or an individual which expresses their opinion or position regarding AHCC or a particular event

An ***analysis*** was considered any attempt at constructing an argument around the issue of AHCC, including the use of theory, concepts, and background information

9) Methodology Used

Quantitative, using existing dataset: reliance on secondary data by a different organisation or data collected by the same organisation for the purposes of another report
Quantitative, gathering own data: author(s) involved in data collection
Qualitative, interview based local: interviews conducted with local health workers, local authorities, local NGO staff or staff of national red crescent/ red cross committees
Qualitative, interview based foreign: interviews conducted with international healthcare workers, international humanitarian staff or healthcare workers
Other secondary sources
Qualitative and Quantitative (interview, field, and desk): combination of different methods, triangulation of data, including at least one qualitative and one quantitative method
Qualitative, gathering own data: Research based on qualitative interviews, focus group discussions, participant observation and other forms of field research or desk based research
Case study: use of different methods to study a specific case or compare a small number of cases

10) If secondary data: From where?

WHO
UN
INGO
NNGO
Local Healthcare
Local Authorities
ICRC
MSF
Academic
Physicians for Human Rights
Multiple
Others
None

11) Definition of attack

Given: author explicitly states what he or she considered to amount to an attack and was therefore included in the report
Inferred: no explicit definition given, but it becomes clear from the description of the attack what the author included in this category

None

12) Explanation of definition

13) Conflict discussed?

Discussed: background information about the conflict given, situated in context-specific environment or development of conflict explained
Not discussed.

14) If explained, how?

15) Definition of violence

Given: author explicitly states what forms of violence he or she considered to amount to a security incident
Inferred: no explicit definition given, but it becomes clear from the description of the incident what forms of violence the author included in this category
None

16) Explanation of definition of violence

17) Trends: Trends stated with regard to the number of attacks

Increasing
Decreasing
Same
Not stated

18) Stated Perpetrator

State armed forces
Armed groups: Militias, private security, and rebel and guerilla movements (ICRC, 2013)
Police
Organised criminal groups
Other State Military
Patients/carers
Multiple
Other
Not specified

19) Attributed motivation

Intentional: WHO definition (The term "intentionality of attack" refers to whether the attack was reported to have been directly targeted at a health object)
Unintentional: attack was considered collateral damage (attack aimed at a legitimate military target, indiscriminate attack or part of a broader attack aimed at civilian spaces
Not Determined (including unreported or unknown)
Mixed

20) Attributed Motivation Details

21) Group attacked

International NGO Staff
Local health care services
Red cross/crescent organisations
Local or unspecified NGOs
Private individuals transporting the sick/injured
UN agency
State armed forces
National Staff
Mixed providers
Not specified
Other

22) Object attacked

Health facility: hospital, clinic or health post (WHO, 2016)
Healthcare worker: healthcare provider such as physician, nurse, midwife, vaccinator, other health care worker including, laboratory worker, health care security, maintenance or cleaning staff (WHO, 2016).
Ambulance/transport
Patients
Bystanders and relatives
Public space
Triage
Preventive Care
Mixed
NA

23) Object attacked II: see above

24) Additional comments: Object attacked.

25) Outcome for Health services

Functional
Partially Functional
Non Functional
Mixed
Not Stated

26) Discussed as type of violation?

Does the author claim that the attack constitutes a violation of a particular normative or legal framework? Does he or she do refer to another source claiming such a violation? If several violations mentioned or used interchangeably for the same crime, it is referred to the more predominant claim

Violation GVA conventions

Violation IHL
War crime
Violation of medical neutrality
Human rights abuse
Not specified
Other

27) Source claiming violation

Reporter (media, press)
Local Health Worker
INGO
Local Government
National Government
UN
Academic
None
Other

28) IF Other; Please specify

29) Roughly how much is theory, hypotheses?

50% or more: high degree of depth and volume of analysis, application of a theoretical framework, and the author's willingness to go beyond description and engage in analytical theorising on drivers and causal relationships of AHCC.
10-50%: the above mentioned characteristics apply to a certain degree, but are not the emphasis in the document
10% or less: solely descriptive nature of the document, no engagement in analysis and no use of concepts that could constitute any attempt at theorising

30) Comment

Short description of the document that highlights important aspects and characteristics or arguments. Including whether protection/preventive strategies are discussed, whether medical neutrality is conceptualised, pointing out certain key words such as targeting of vaccination campaigns, double taps, a particular discourse, human shields.

APPENDIX 6: EXPERT INTERVIEWS

Eight expert interviews were conducted with expert practitioners and academics, from a range of different positions and organisations. Interviewees were strategically selected to represent different position (headquarters, national office, and field-based) and organisational (humanitarian, human rights, intergovernmental, and coalition convener) perspectives. Interviews were conducted by Skype or in person in English and ranged from 30 to 90 minutes in length. All interviewees were informed about the objectives of the research and were given the option of anonymity. All interviewees provided consent and data was securely stored.

Interviews were conducted with:

- Christian Captier, MSF
- Dana Moss and Hussam Wafa Issa Physicians for Human Rights Israel
- Diederik Lohman, Human Rights Watch
- Emma Winberg and James Le Mesurier, Mayday Rescue
- Erin Kenney, WHO
- Jo Kuper, MSF
- Leonard Rubenstein, SHCC
- Dr. Sherin Varkey, UNICEF

APPENDIX 7: EXPERT SEMINAR

The research team convened a multidisciplinary, expert seminar at Chatham House to present initial findings and gather critical feedback. This feedback was analysed separately and in combination with the analytical categories from the rapid review. In follow up, all participants in the seminar were provided with a draft of the report for further feedback and validation. All participants were informed about the objectives of the seminar and research and were given the option of anonymity. All participants provided consent and data was securely stored.

Health Care Under Fire: The New Normal?
Review of Initial Findings
Thursday 26th January: Chatham House, London

Seminar Objective:
To critically analyse and validate initial findings to feed into the final analysis stage of the project and inform future research. Participants will get an insight into the research scope, design and initial findings and explore the validity, relevance, gaps and areas of greater importance for further exploration.

Date, Time and Location:
2:30pm – 5pm, 26th January 2017 at Chatham House,
10 St James's Square, St. James's, London SW1Y 4LE

Host/Facilitators: Chatham House, LSE Consultancy Group.

Attendance: Chatham House, ICRC, MSF, Save the Children, LSE, King's College London, Mayday Rescue, London School of Hygiene and Tropical Medicine (LSHTM)

Seminar attendees included:
- Lt. General Louis Lillywhite, Chatham House
- Nazaneen Nikpour, Chatham House, LSHTM
- Rachel Thompson, Chatham House
- Dr. Stuart Gordon, Chatham House
- Sarah Cotton, ICRC
- Jo Kuper, MSF
- James Le Mesurier, Mayday Rescue
- Emma Diggle, Save the Children
- Preeti Patel, King's College London

Outline:

Time	Duration	Topic	Facilitator
2:30	5	Introductions and Welcome	Host

2:40	5	Overview of Project, seminar expectations and agenda	LSE
2:45	15	Rapid Review: The Method in brief • Search terms / Databases / Categories • Limitations / Overview of results	LSE
3:00	20	Findings: Knowledge Production Feedback; discussion	LSE
3:20	20	Findings: Trends and Patterns Feedback; discussion	
3:40	15	BREAK	
3:55	20	Findings: Theorising Feedback; discussion	LSE
4:15	30	Where to go from here – discussion • Main findings after initial analysis • Thoughts on main findings • Findings that need more analysis/depth	LSE
4:45	CLOSE	Wrap up and Recap of actions	LSE / Chatham House

APPENDIX 8: REGIONAL CLASSIFICATIONS USED IN ANALYSIS

Countries included in regional classifications listed below:
Middle East: Lebanon, Syria, Palestine, Yemen, Iraq, and Bahrain.
Africa: Somalia, South Sudan, Nigeria, Libya, Liberia, Sudan, Uganda, and Democratic Republic of Congo.
Asia: Pakistan, Myanmar, Afghanistan, and India.
Eastern Europe: Turkey, Georgia, and Former Yugoslavia.
South America: Colombia.

APPENDIX 9: DATA COLLECTION SYSTEMS

Organisation	Summary	Relevance
Stockholm International Peace Research Institute (SIPRI)	No database and only one publication on AHCC (by Rachel Irwin) that was included in the rapid review and discussed in Section 5 ('Strengths of the Evidence Base'). Their databases focus on arms transfers and trade (https://www.sipri.org/databases , accessed 01.03.2017) and are thus not relevant unless specific research on the role of arms transfers in AHCC will be conducted. **Contact:** Dr Rachel Irwin: rachel.irwin@kultur.lu.se (http://www.kultur.lu.se/en/person/RachelIrwin/(accessed 01.03.2017; https://www.sipri.org/about/bios/dr-rachel-irwin, accessed 01.02.2017).	No
Royal United Services Institute (RUSI)	No database or publication on AHCC, but project on air power and technology which could be useful in cooperative research on certain forms of attacks, weapons systems in AHCC: https://rusi.org/projects/air-power-and-technology (accessed 01.03.2017): **Current Air Operations:** Analysis of current operations being undertaken by the UK, NATO and other air forces such as the Russian and Saudi Air Force, including over Syria, Iraq, Yemen, the on-going Baltic Air Policing mission and NATO Quick Reaction Alert. **Ethical and Legal Implications of Unmanned or Remotely Piloted Systems:** understanding the benefits of remotely piloted systems while addressing public and political concerns about conducting operations from a distance. **Contact:** Justin Bronk, Research fellow justinb@rusi.org	Partially

International Institute for Strategic Studies (IISS)	Their **Armed Conflict Database** (http://acd.iiss.org, last accessed 01.03.2017) does not provide disaggregated data on AHCC. Provides: IDPs, fatalities, conflict summary, human security (including civilian casualties). The Armed Conflict Survey (annual publication established in 2015) refers broadly to AHCC (specifically as obstruction) as an aspect of armed conflict on civilians. External sources used (in their example case of Iraq: CIA World Factbook, Human Rights Watch, ReliefWeb, UN Development Programme, UN Documents for Iraq, UN High Commissioner for Refugees (UNHCR), UN Office for the Coordination of Humanitarian Affairs (OCHA) (https://acd.iiss.org/en/conflicts/iraq-6e52?as=6BA1E1B3666E42AE90A543A78825E84A, accessed 02.03.2017). They also held an event on the impact of conflict on health infrastructure: http://www.iiss.org/en/events/events/archive/2016-a3c2/june-4a2d/the-human-and-socio-economic-cost-of-conflict-593b (accessed 02.03.2017). **Contact:** Virginia Comolli, Research Fellow for Security and Development, IISS (http://www.iiss.org/en/persons/virginia-s-comolli, accessed 02.03.2017).	Partially
The International NGO Safety Organisation (INSO)	Tracking NGO safety indicators across all countries (http://www.ngosafety.org/vision_mission, accessed 01.03.2017). Provides the following services: 24/7 Flash Alert, Incident Tracking, Analysis Reports, Briefings/Meetings, Orientation, Crisis Assistance, Training, Policy Reviews, Site Reviews. **Country example Iraq** (http://www.ngosafety.org/country/iraq, accessed 01.03.2017): **Strengths** are the disaggregated data available on context analysis, NGO members and staff, people in need, gross incident rate (total, per month), authors of incidents that are identified (International Military	Partially

	Forces, Organised Armed Groups, government and CRI (acronym not explained)), types of incidents (ranging from threats and assaults to direct and indirect fire). Key risks and mitigation measures are identified for each specific country. **An apparent weakness** is that while according to INSO, it is 'listing of all reported and verified security incidents received during the time-period', its website does not allow to review the verification process (http://www.ngosafety.org/services, accessed 02.03.2017). It is therefore difficult to draw any conclusions on its usefulness or applicability in the case of AHCC. Overall, the database is not designed to disaggregate data to track AHCC specifically as a distinct form of attack, but it already includes a broad range of forms of attacks and INSO could represent a partner for further cooperation.	
British & Irish Agencies Afghanistan Group (BAAG)	Focus is solely on Afghanistan, self-understanding as an 'advocacy and networking agency' (http://www.baag.org.uk/about-us, accessed 02.03.2017). Their website has a section on health and education (http://www.baag.org.uk/afghan-issues/health-education, accessed 02.03.2017), but it is more focused on the impact of the conflict on access to and the provision of services. However, they do mention the problem of security incidents and them to be 'in direct contravention of international law and … largely avoidable – the Afghan security forces, for instance, have been known to occupy schools in conflict-affected provinces and thus directly place them at risk of attack.' (Ibid.). Their information is derived from a UN report on AHCC. Furthermore, they declare that 'BAAG raises these issues through its information sharing, events and research activities, striving to convey a more accurate picture of service provision to policy makers and the public, and recommending practical solutions' and they	Partially

	issue a set of recommendations specifically addressed at the UK government (Ibid.) **Strengths:** Assembling a wide range of organisations directly engaged in relevant field work in Afghanistan, the BAAG could be an interesting partner to engage in further region-specific research. **Weaknesses/Gaps:** The group does not provide any additional sources of information concerning relevant data collection on AHCC and is reliant on the same actors mentioned in the analysis of the rapid review.	
Bureau of Investigative Journalism (BIJ)	Focus on drone war (https://www.thebureauinvestigates.com/projects/drone-war, accessed 02.03.2017). **Strengths:** Transparency and detailed description of their methodology. Sources include news reports, statements, documents and press releases, occasionally also information from terrorist propaganda, such as Voice of Jihad in Afghanistan or Inspire in Yemen(https://www.thebureauinvestigates.com/explainers/our-methodology, accessed 03.03.2017). **Weaknesses:** Data are reported by countries, but mostly quantitative data presenting crude numbers of civilians killed and strikes carried out, not much qualitative background information. The drone project could be interesting for cooperation on how to prevent this particular form of violence and document incidents related to the use of drones, but it does not present data focused specifically on AHCC.	Partially

APPENDIX 10: FUNDING POSSIBILITIES

Bill & Melinda Gates Foundation	(http://www.gatesfoundation.org/What-We-Do); Areas to pitch research within: Learning and Innovation area of focus within Emergency Response program ('grants in this category often go toward basic relief support—including food, water, sanitation and hygiene, healthcare, and shelter—in the acute phases of complex emergencies, such as during peaks in violence or displacement') in Global Development - this focal area includes providing funding to The Guardian to cover reporting on AHCC. (http://www.gatesfoundation.org/What-We-Do/Global-Development/Emergency-Response , accessed 03.03.2017). The Global Policy & Advocacy Program (http://www.gatesfoundation.org/Who-We-Are/General-Information/Leadership/Global-Policy-and-Advocacy, accessed 03.03.2017) could also support advocacy and policy efforts in the field of AHCC . **Contact:** Anja Langenbucher, http://www.gatesfoundation.org/Who-We-Are/General-Information/Leadership/Global-Policy-and-Advocacy, Director, Policy and Advocacy Office Europe
Open Society Foundations	Possibility to pitch to their Law and Health or Access to Medicines programmes. Further research and investigation needed concerning fit and grant making opportunities - Access to Medicines: not focused on the impact of conflicts at the moment and more about marginalised groups, but could potentially be expanded to AHCC (https://www.opensocietyfoundations.org/topics/access-medicines, accessed 03.03.2017). - Law and Health: centred around the idea of the 'rule of law and respect for human rights safeguard the health of all, especially the most vulnerable', could definitely also entail IHL violations and AHCC https://www.opensocietyfoundations.org/topics/law-and-health (accessed 22.02.2017). - Expert panel was held in cooperation with Physicians for Human Rights on AHCC in 2016 (https://www.opensocietyfoundations.org/events/targets-their-backs-providing-health-care-conflicts-without-rules,

	accessed 03.03.2017).
Berggruen Institute	*21st Century Council:* A high-level forum that does not include AHCC yet, but could provide access to important stakeholders. Would especially concern conflict setting with international actors involvement (http://governance.berggruen.org/councils/21st-century-council, accessed 03.03.2017).
United States Institute for Peace (USIP)	They do not work on AHCC specifically yet, but cover several key areas which are related to AHCC. *Conflict Analysis and Prevention:* 'Strategies to prevent, manage or resolve violent conflict can succeed only if they are grounded in clear analysis of the causes and potential trajectory of a conflict'. Could potentially be interested in research on the causes and motivations behind AHCC (https://www.usip.org/issue-areas/conflict-analysis-prevention, accessed 04.03.2017). **Contact:** Colette Rausch (https://www.usip.org/people/colette-rausch, accessed 03.03.2017). *Global Policy:* USIP 'works with other institutions, government and civil society groups to discuss and develop better strategies that will prevent, mitigate or resolve violent conflict' (https://www.usip.org/issue-areas/global-policy, accessed 03.03.2017). **Contact:** Linwood Q. Ham, Jr. (https://www.usip.org/people/linwood-q-ham-jr, accessed 03.03.2017). *Human Rights:* https://www.usip.org/issue-areas/human-rights (accessed 03.03.2017).
John D. and Catherine T. MacArthur Foundation	Together with USIP, they provided funding to Katherine Footer et al. for their case study about healthcare in Burma in 2014.[118] Several of their focus areas are related to the topic of AHCC, but there is no specific programme on global health or security and health. Depending on the subject and objective of research, it could fit with each of these focus areas: *International Peace & Security:*

[118] Footer K.H.A., Meyer S. Sherman S.G. and Rubenstein L. (2014).

	(https://www.macfound.org/programs/ips/, accessed 03.03.2017). *Human Rights:* (https://www.macfound.org/programs/human_rights/, accessed 03.03.2017). *Population and Reproductive Health:* (https://www.macfound.org/programs/population/, 03.03.2017).

APPENDIX 11: POTENTIAL PARTNERSHIPS

The below list highlights several possible strategic and complementary partnerships for research, action, policy debate and agenda setting, including, to some extent, exploration of regional and global opportunities. To further elaborate on regional and national partnerships a detailed mapping should take place, once decision on themes and locations has been identified for further research.

Global / Regional

Deutsche Stiftung Weltbevölkerung	https://www.dsw.org/en/?noredirect=true , accessed 02.03.2017): Involved in advocacy and policy cooperation across Europe and globally. Focus is mainly on sexual and reproductive health, but also other global health efforts. They are working through G7 advocacy, the European Advocacy Coalition for Global Health R&D (EACH) Coalition and the institutions of the European Union (https://www.dsw.org/en/themes/advocating-for-a-better-world/, accessed 03.03.2017).
International Health Protection Initiative (IHPI)	http://ihpi.org (Accessed 04.03.2017). IHPI is a movement of a variety of stakeholders, that includes, NGOs, organisations and institutions. It's a lobbying group towards the United Nations to act to uphold the Geneva Conventions, specifically focusing on Healthcare respect and protection. A founder of SHCC, they have a large lobbying network of operational and strategic partnerships that could be drawn upon and collaborated with.
Medico International	https://www.medico.de/en/ (Accessed 04.03.2017). Organisation working specifically on the human right to health and has a global reach and projects, but a deeper and specific focus and wide range of partnership and field presence in Asia and Latin America. Work include advocacy, aid delivery, developing partnership and monitoring of human right to health
British Medical Association (BMA)	The BMA has spoken up against AHCC (specifically within their focus on *Human Rights* within *International Work*). As of thus far they have only been part of condemning AHCC and encouraging members and doctors to take measures to get involved (https://www.bma.org.uk/collective-voice/influence/international-work/human-rights/medical-impartiality, accessed 04.03.2017).
Forensic Architecture	http://www.forensic-architecture.org/ (accessed 04.03.2017). Already partnering with MSF, their works combines cartography and

	image analysis, judicial expertise and architecture and worked in areas of violence and conflict to 'shed light' on crimes and violations that may have been committed and start to build evidence. They are able to partner with and support operational agencies, through advanced satellite and surveillance technologies in particular provides "convergence of political, military and humanitarian interests", where they can reconstruct instances and events such as reconstructing aerial attacks.
Satellite Sentinel Project	http://www.satsentinel.org/documenting-the-crisis/bombardment-and-attacks (accessed 04.04.2017). This project documents, investigates and tracks attacks in warfare using satellite imagery analysis, to identify weapons, transport and hence perpetrators. The detailed technological analysis, complemented with contextual data and ground witness reports and photography can provide a rigorous base that can complement or use to support other research and policy debate. Moreover, expansion of such a project beyond Sudan could be explored.
International Institute for Strategic Studies	https://www.iiss.org (accessed 04.03.2017). As an advanced and renowned actor on global security, political risk and military conflict, and with specific work on health security they provide a useful and strategic partnership. Additionally, their regional offices, operations and contacts can support the established and identification of regional hubs and actors.
Every Casualty Reporting	In their promotion of global casualty reporting mechanisms, they could disaggregate numbers and have a section on healthcare related incidents http://www.everycasualty.org
Max Planck Institute	(a) Comparative Public Law and International Law: they have a project on International Health Governance, currently only in cooperation with the Forschungsstätte der Evangelischen Studiengemeinschaft e.V. / Institute for Interdisciplinary Research (FEST), http://www.mpil.de/en/pub/research/areas/public-international-law/ipa/international-health-care.cfm (accessed 01.03.2017). (b) Social Anthropology: as the recommendations included the importance of contextualised research, drawing on cross-fertilization of different social science disciplines, high quality ethnographic and anthropological research should be conducted and included in future policy making, https://www.mpg.de/153644/ethnologische_forschung

	(01.03.2016)
Aid Worker Security Data Base (AWSD)	As a provider of statistic for major international studies, and also supported by multiple humanitarian agencies on the ground, AWSD holds a unique position, trusted by and with access to vast amount of security reporting. Leveraging a relationship to complement and cross analyse data specific to AHCC could be an opportunity, whilst also promoting further breakdown of categories of reporting and compatibility with WHO definitions. https://aidworkersecurity.org/ (Accessed 04.03.2017).
British International Studies Association, Global Health Working Group	http://bisaglobalhealth.org (accessed 04.03.2017). Their work provides a platform for global health collaboration, an opportunity to partnership and leverage their networks combining the consolidation and promotion of existing research on the politics of global health and opportunity to collaborate in working groups, round tables. The organisation explore and arrange discussions linking how international politics can better engage in global health. Establishing joint panels or working groups and building on academic, international politics and global health expertise is a possible opportunity.
Afghan Analysts Network, (ANN)	https://www.afghanistan-analysts.org/about-us/ (accessed 04.04.2017). Based in Afghanistan, AAN delivers policy research that combines multiples stakeholders and experts, to contribute to informing policy and increasing local understanding of local and contextual realities. The opportunity to partners with a research = based, local and expert group could combine and influence different disciples, including humanitarian practitioners, policymakers, journalists and academics.

APPENDIX 12: CLIENT FEEDBACK FORM

A structured feedback form was developed and provided to the clients with drafts of the report. This ensured that client feedback was prioritised and that the report had optimal utility. The feedback form was used for two separate rounds of feedback, and was accompanied by written, verbal, and in-person follow-up with the clients.

Section	**Comments: Content**	**Comment: Structure / logic**	**Consultant response**
Executive Summary			
Introduction	.		
Methodology			
Rapid Review			
Key definitions and categories			
Categorization and Analysis			
Limitations			
Expert Interviews & Seminar			
Limitations			
Conceptual Framework			
Knowledge Regimes			
Methodologies and Origins			
Epistemic communities			
Knowledge and Truth			
What makes it into the discourse			
Language and Definitions			
Statements and Claims			
Closing the Loop			
Weakness of Evidence Base on trends, motivations and			
patterns			
Trends			
Motivations			
Patterns			
Exceptionality of Syria			
Medical neutrality / medical ethics			
Unintended Consequences			
Conflating analytical objectives with advocacy aims			
Simple narratives			
Exceptionalism and Silencing			
Converting global attention into an insurgency incentive structure?			
Politics of Reporting			
Best Practices			
Recommendations			