IFMSA Policy Document
Protection of Healthcare

Proposed by Team of Officials
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Policy Statement

Introduction:
In times of peace, through ratifying international human rights treaties, states have the legally binding obligation to protect and promote human rights. Thereby, to achieve the right to the highest attainable standard of health, it is necessary to safeguard health services. In warfare, medical systems can be put in danger through attacks or undue blockages against personnel, facilities or transportation. Moreover, other threats can be the misuse of the Red Cross and Red Crescent Emblems. Therefore, states must strengthen the implementation of International Humanitarian Law to alleviate armed conflicts’ effects on civilians, especially on medical practitioners.

IFMSA position:
The International Federation of Medical Students’ Associations (IFMSA) reaffirms the role of the International Humanitarian Law (IHL) in alleviating harm in armed conflicts and believes in the importance of a comprehensive, intersectoral and inter-collaborative approach to get it implemented. Alarmed by increasing threats, such as the COVID-19 pandemic, cyberattacks and environmental disasters, IFMSA encourages collaboration between stakeholders and endorses them to develop concrete measures to keep healthcare providers and the communities safe.

Call to Action:
The IFMSA urges all parties to uphold themselves to act in accordance with the principles of both the International Humanitarian Law (IHL) and the International Human Rights Law (HRL) and implement strategies to avoid threats to the functional integrity of the health sector. Furthermore, we call on:

Governments to:
- Design prevention and response interventions in healthcare attacks based on comprehensive data collection.
- Improve systematic methods for the production of comprehensive data in all health services, regardless of the existence of conflict or its intensity.
- Manage and support the active role of international, national, and local non-governmental organizations in responding to attacks on healthcare.
- Provide legal, psychological and social support for all the victims subjected to attacks on healthcare.
- Set the development of the Surveillance System of Attacks on Healthcare (SSA) and improve its data capacity on the World Health Organization (WHO) agenda.
- Systematically analyze data provided by the SSA and other sources to better understand trends in healthcare attacks nationwide and use this to develop appropriate protection and response strategies to health threats.
- Work together with other nations to collect data, document good practices, and advocate for the protection of health care in complex humanitarian emergencies.
- Establish and promote laws to impose sanctions on any violations of the Geneva Conventions and its Additional Protocols and protect the Red Cross and Red Crescent Emblems.
- Determine indicators and benchmarks to draw and enforce public strategies to create a safe workplace for medical practitioners.
- Develop training and public education programs for better implementation and ratification of the Geneva Conventions and other relevant international treaties.

United Nations (UN) and World Health Organization (WHO) to:
- Implement follow-up methods to monitor the progress made on the 2286 Security Council Resolution.
- Hold high-level meetings with targeted ministries to advocate for designing robust healthcare security strategies and accountability mechanisms for violence against healthcare.
- Support organized initiatives that help victims of violence in the Healthcare industry.
- Educate the general public and governing bodies on the violence experienced by healthcare providers.
Extensively publish, understand and distribute the SSA data.
Cooperate with state parties on the implementation of respect, protection and fulfillment of the right to health as a human right.
Establish health-related standards and adopt legally binding treaties and conventions to strengthen the protection of healthcare workers.
Develop training materials and courses for the medical staff and students to effectively manage workplace crises, defend themselves against threats in healthcare, and effectively advocate for the preservation of the security and integrity of health service infrastructure.

International organizations and Non-Governmental organizations to:
- Partner with other organizations to advocate for the creation of laws by governmental institutions guaranteeing healthcare providers' safety and rights.
- Monitor and hold states accountable for following up customary laws, especially IHL and HRL;
- Collect data inside healthcare levels on threats against healthcare services, and report this data through conferences, social media, papers and other relevant mediums.
- Advocate for special attention to be given to vulnerable healthcare provider groups.
- Ensure accountability and follow-up on the governmental authorities' responsibility to develop and fulfill response plans to attacks on healthcare.

Health Sector Organisations and Medical Education Institutions to:
- Incorporate IHL and HRL-related content in the curriculum of medical schools, and provide elective courses on healthcare worker safety.
- Promote and establish a supportive and secure workplace by implementing safety procedures that ensure occupational safety and health.
- Develop monitoring and surveillance systems to evaluate worker and patient safety, including mental health and infectious diseases prevention.
- Assist and actively support relevant stakeholders in the development of a reporting system focused on violence against healthcare providers and encourage medical staff to document violence.
- Support impacted healthcare professionals by offering legal, psychological, economic, and social support in cooperation with other NGOs and governmental bodies.
- Conduct research on the impact of violence on healthcare workers and develop strategies to improve the protection of health services and workers.

IFMSA National Member Organizations (NMOs) and medical students to:
- Collaborate with other NMOs on impactful advocacy campaigns related to the protection of healthcare.
- Share knowledge on their internal processes targeted towards engaging medical students in issues surrounding the protection of health services with other NMOs.
- Encourage members to advocate for full implementation and respect for IHL at local, national and high-level meetings.
- Conduct and enroll activities related to the protection of health services and human rights for medical professionals under the IFMSA Emergencies, Disaster Risk and Humanitarian Action and Ethics and Human Rights in Health Programs.
- Host the IFMSA Health Care in Danger (HCID) Workshop in SRTs and encourage members’ attendance.
- Draft national policy documents on the protection of healthcare, targeting relevant stakeholders with a focus on advocating for the incorporation of healthcare in danger in medical curricula.
- Facilitate educational opportunities for student involvement in the healthcare sector regarding the protection of healthcare infrastructure and the promotion of healthcare services locally.
- Strengthen the collaboration with the International Committee of the Red Cross (ICRC) and WHO by initiating partnerships with the local HCID focal points, as well as the WHO regional offices and other organizations.
**Position Paper**

**Background information:**
According to the WHO, there are 136 million health and social workers globally, of which approximately 70% are women. These workers have the right to have decent work, which includes protection of health and safety risks at work [1].

According to the WHO, an attack on health care is "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. Types of attacks vary across contexts and can range from violence with heavy weapons to psychosocial threats and intimidation [2].” Healthcare workers are five times more likely than workers in all other industries to face workplace violence, according to the government of the United States [3]. WHO statistics reveal that 38% of medical healthcare workers experience physical abuse at some point in their careers, and even more face verbal threats [4].

In 2016, The United Nations adopted the 2286 Security Council Resolution condemning any attacks on the healthcare sector, adding to the pre-existing 11 resolutions focused on this matter [5]. One crucial action point in this resolution was the direct follow-up of the Secretary General every 12 months on reports regarding violations of the resolution. This resolution also mentions the importance of national actions regarding education and the presence of peace-keepers to mediate matters throughout periods of conflict [5].

IHL is a set of rules that aims to lessen the effects of armed conflict for humanitarian reasons. It limits the tools and techniques of combat while protecting those who are not or are no longer taking part in the battles. The law of war, also known as the law of armed conflict, is another name for the IHL [6].

The Safeguarding Health in Conflict Coalition recorded 1335 instances of violence against or obstruction of health treatment in 49 conflict-affected countries and territories in 2021 during a widespread COVID-19 pandemic. Despite the similarity in the number of incidents in recent years, some underlying variations reflect broader global patterns. It makes the effects of those attacks more severe for individuals who depend on these services [7].

Healthcare facilities that are damaged or destroyed result in numerous preventable fatalities. Other long-term consequences affect those who do not receive the necessary care. Attacks against medical facilities and staff during a conflict should be prioritized when estimating the conflict's impact. Such information is significantly more difficult to gather than battle fatalities and civilian homicides; hence, it is rarely considered in overall war evaluations [7].

Between 2016 and 2020, the ICRC recorded 3,780 attacks and obstruction cases in an average of 33 countries each year. Reported attacks and events occurred two-thirds of the time in Africa and the Middle East, being Afghanistan, the Democratic Republic of the Congo, Israel, and the Palestinian territories where most incidents were reported. The ICRC themselves recognise that their total statistic undercounts the actual number of attacks due to the inherent difficulty to gather such data in war areas [8].
According to the WHO, 63% of health workers report experiencing any form of violence at the workplace [1]. Threats against healthcare personnel have terrible repercussions in circumstances where healthcare systems are already weak. The outcomes of compromising the safety of healthcare with the loss of the lives of healthcare professionals will also impact civilians in terms of not receiving proper and comprehensive access to healthcare [9].

**Discussion:**

1. **Complexity of violence against healthcare**
   - **Background**

   Between 8 to 38% of healthcare providers experience physical violence throughout their careers [10]. In 2021, amidst the pandemic, the violent attacks against health haven't stopped; their numbers remain similar to previous years [5]. In warfare, doctors often encounter aimed attacks in countries across Africa and Asia [11]. In armed conflicts, the ICRC works to protect and assist people affected by that situation, to assure that all parties respect the IHL, to document violations, and to present them to the relevant authorities confidentially [12]. Another humanitarian organization that requests accountability for human rights abuses in warfare is Physicians for Human Rights (PHR). It advocates for the protection of the healthcare workforce in armed conflicts in Myanmar, Ukraine and Syria [13].

   - **Underlying Factors**

   - **Ethnicity**

   Healthcare providers who are not initially locals of the area they are providing care in suffer more from attacks because of their different identity groups. Hereby, ethnicity represents a vulnerability in the health setting [11]. The migrant health workers face more challenges than their local colleagues; their frontline position during the pandemic exacerbates their existing vulnerabilities [14]. A relevant example of this is the Medical Aid for Palestine (MAP), a humanitarian organization established in Lebanon [15]. Under MAP statements, health workers from occupied Palestinian territory do their job in unsafe places because of the systematic discriminatory customs and violations of international law by Israeli forces [16].

   - **Gender**

   A study conducted in 2020 in all WHO regions found that although women represent 67% of the health and care workforce worldwide, women encounter workforce challenges disproportionately, especially those associated with social protection, working conditions and safety. The root of the problem might be derived from gender: occupational segregation, pay inequality, and underrepresentation in leadership and decision-making [17]. According to the Global Gender Gap Report 2022, the gap between gender pay needs 132 years to end the global gender gap [18].

   ➔ [Women in armed conflicts]

   In warfare, pre-existed structural inequalities, gender roles, and social power dynamics might change or even aggravate the conditions for females [19]. Women remain victims of gender-based discrimination, although international law ensures them equal rights and protection. In armed conflicts, the civilian injury appears on a gendered terrain; therefore, it is essential to put a gendered perspective to the IHL in order to address gender imbalance [19].
A field study in Lebanon and Colombia reveals that in armed conflicts or other emergencies, gender roles affect people differently. Ambulance drivers are predominantly males, whereas females are outreach workers, as each role comes with its own risk [20]. Due to gender stereotypes, women are perceived to not have a proper response under stress leaving a male interlocutor to negotiate ambulance access at the checkpoints. Also, the outreach team normally places a woman ahead to enhance the possibility of being accepted [20]. Another study led by the ICRC on access to healthcare during armed conflict found that from the 199 incidents en route involving attacks on medical vehicles and personnel, 17.6% took place at a checkpoint. It highlights the importance of developing concrete actions to prevent attacks on health at checkpoints [20].

Sometimes the intersection of gender and the category of services might place health professionals at greater risk. The 2015 report by the Swedish Red Cross studied violence towards healthcare practitioners with a gender perspective based in Lebanon and Colombia; it was found that in warfare, individuals who took certain extreme opinions would endanger male gynecologists since they found it an offense to women's privacy [20].

➔ [Female health workers in the COVID-19 pandemic]
Pandemics can potentially worsen inequity through gendered effects [21]. In general, the pandemic has made it harder for women to advance. Women have experienced more work disruption than men have due to increases in childcare and other duties. Additionally, more women than men work in essential tasks that put them at risk of infection and psychological stress.

Moreover, telecommuting has increased the responsibilities of men towards childcare which will in turn decrease the gender gap in household duties and promote gender equality [22]. The women's responsibility on the front line of health and social care during the pandemic place them at a higher risk. They work in a health sector that exposes them to mental and physical health injuries [23].

A Canadian study shows a lack of balance in the leadership roles, which were prevalently given to men, and the increase of household responsibilities, which were taken more often by women [24]. Another Brazilian study showed that not only gender but also its intersection with race resulted in worse working conditions and security. Less personal protection equipment and training were given to black people (being black women the least protected), and more harassment and worse mental health-related indicators were related to women, black women having again the worst punctuations [25].

➔ [Sexual violence]
Stigma or insufficient data about the perpetrator's motives, which can exacerbate existing violence and further violence, can be the reasons behind the lack of data on the sexual violence of female health workers [26].

➔ [Lack of data on female attacks]
Fear of revealing their own identity or absence of awareness is responsible for the lack of gender-sensitive data. Attacks against female health workers receive less consideration and get less frequently reported [26]. To understand better the gender trends of attacks, healthcare workers need to be aware of how to do a report and when. Even minor incidents, like insults or threats, are important to report [20].
• Department
Besides female personnel, the less experienced personnel, those who work during an evening shift or an emergency department, develop higher exposure to brutality [27].

• Types of violence in armed conflict vs. other fragile circumstances
According to the Geneva Convention, in armed conflicts, medical health forces must be protected under the IHL. Besides armed conflicts, there are other circumstances where violence comes naturally. In both settings, healthcare workers confront the weapons force, but the incidents worsen in armed scenarios. In armed conflicts, the belligerent forces attack healthcare providers with firearms or sharp objects. More research on weapon use is necessary to develop practical measures to protect healthcare workers [27].

Epidemics and Pandemics:
Healthcare personnel was aggessed physically and verbally because of the pandemic by people frightened of the virus. In warfare, those incidents kept continuing, putting those wounded by the battle at greater risk [28]. During the pandemic, health workers experienced stigma because of contradictory information, fake news or conspiracy theories. As a result, medical personnel was intimidated, threatened or even physically attacked [28]. Hereby, healthcare workers abandon their jobs, or they shut down healthcare facilities. In the end, the general population remains to endure the effects of the war and pandemic alone[28].

To combat the COVID-19 ‘infodemic’, authorities must give coherent directives, be transparent and report frequently. In warfare, this leadership can make the difference between life and death [28]. In addition, during the 10th Ebola Response that lasted from 2018 to 2022, 483 total attacks were recorded on healthcare services in Congo, of which 49 arson attacks were on health facilities. According to the same resource, 27 health workers were abducted, and 25 died in violent attacks. It is important to note that 277 health workers reported threats, with a more substantial number of at least 50 women reported sexual abuse during the recruitment processes of the Ebola pandemic. Subsequently, many of the staff required the utilization of armed escorts [29].
• Cyber attacks

An ICRC report highlights the relevance of the human cost of cyber operations. It also affects the healthcare sector since the health system depends on digitality [30]. As a result, cyber activities might lead to physical harm, influencing access to essential medical services in times of peace and warfare [31]. According to WMA (World Medical Association), physicians who deliver transparent information about the pandemic face hostilities on social media. Those cyber harassments can be just threats or can become concrete incidents [32].

Even when epidemics and wartime collide, IHL envisions protecting medical institutions and services. The ICRC's international law and policy director, Helen Durhan, asserts that IHL regulations "apply in cyberspace and must be obeyed". This means that all sides to an armed conflict must prevent accidental injury and refrain from conducting cyber operations to harm medical infrastructure [31].

• Violence in times of peace

In times of peace, attacks at the health workplace are underreported since medical personnel considers violence a routine. Violence comes not only from the patients but also from medical colleagues. According to the United States National Library of Medicine, only 30 percent of nurses report the incident, and 26 percent of emergency physicians report the violence [33][34][35].

- Forms of violence

Although the UN Security Council 2039 requested a cease of violations of IHL, attacks on health still occur in armed conflicts, for example, murder, rape, physical abuse, looting or destruction of medical facilities and medical transportation. The COVID-19 pandemic reflects how a recent model of violence and stigmatization against healthcare workers emerged. ICRC recorded a rise of 50 percent higher in violent incidents associated with the pandemic response [36]. Despite the general acknowledgment of health workers' efforts in fighting against pandemics, they are still threatened and assaulted. They have insufficient or inadequate protection, growing workload, burnout and mental distress [37]. In 2020, Amnesty International recorded an increased number of attacks against healthcare in relation to COVID-19. This trend jeopardizes the essential frontline response and the whole community [38].

Attacks against healthcare providers are variant in nature, including but not limited to intimidation, threats and restrictions that harm the healthcare system. Attacks that might become violations of IHL are direct attacks on facilities, transports, personnel and patients or misuse of the Red Cross emblem. Interpersonal violence in health can exist in both times of peace and warfare. It continues in conflict, or it might get worse. Tensions among various communities and stress about family members can trigger interpersonal violence. Attacks in the context of COVID-19 pandemic, aggravated by restricted equipment and medical supplies, express this concern. It is essential to differentiate interpersonal violence from politically motivated violence to respect the framework of the obligation of 'duty-bearers' in armed conflict to protect civilians, including medical care in hostilities [39].
2. Attacks on healthcare: prevention and protection

- Impact of violence against healthcare

The impact of violence against healthcare is broad and wide-ranging. Significant effects on the affected healthcare workers include physical or life-threatening injuries, mental health challenges, lowered job performance and satisfaction, and increased loss of personnel from the health organization [40]. The psychological and emotional consequences of violence have been widely acknowledged, with studies showing a link to a higher incidence of burnout [41], higher levels of psychological distress, symptoms of mental health conditions including anxiety and depression, as well as poor morale and decreased productivity in the healthcare team [42][43]. Therefore, this negatively impacts healthcare personnel's ability to execute their jobs, lowering patient safety and impacting the quality of care that patients receive [41]. Additionally, other than the victims, being exposed to or witnessing violence against other colleagues may lead to similar impacts and has been shown to contribute mainly to poorer work performance due to unsafe feelings [44].

The overall impact of these costs is dynamically correlated (Figure 2) and can gradually lead to a breakdown of a well-functioning health system if left unaddressed [45]. When healthcare workers experience violence, immediate interventions are implemented to ensure their safety and quality of care [46]. The support offered in such scenarios spans from immediate medical treatment and counseling by specialists or peer groups to seeking other professionals' advice on legal issues, support from hospital management on taking leave and initiating internal investigations. Nevertheless, the support offered in the area of mental health and psychosocial support in lower-income countries is insufficient, even more so in conflict situations where the need for such support increases dramatically due to prolonged exposure to violence [47]. Recovery from situations of violence may involve a long period. Yet, it is crucial that when healthcare workers do ease back into work, they feel safe from physical and psychological violence in the workplace environment [48].

Figure 2: dynamics between various effects of violence against healthcare

In conflict areas, healthcare workers are often attacked, threatened, detained or even killed, resulting in medical worker exodus due to the threat of violence. This situation jeopardizes the availability, access, and cost of health services during conflicts and the ability to rebuild a robust health system and workforce post-conflict [49]. Although this phenomenon occurs in both high and low-income countries, it further increases the vulnerability of low-income countries as their health systems are often already weak even before conflict occurs [48]. For example, as of 2020, the prolonged conflict in Syria has led to more than 70% of its health workforce fleeing, and those that remain continue to face danger and insecurity within an understaffed and underfunded system [50]. To protect healthcare workers in conflict zones, other than denouncing violations of IHL, international institutions must also investigate and prosecute perpetrators of violence whilst thoroughly documenting attacks on health workers to ensure proper accountability and implementation of IHL [51].
- **Effects of the protection of health services**

The World Health Organisation (WHO) recommended interventions against violence in healthcare should be integrative, participative, cultural and gender-sensitive, non-discriminatory and systematic [48]. Health services must be protected before violence manifests by applying preventive measures [45]. Whether that be training sessions and education programmes on the individual level, or improvements to the work environment and work practices on the organizational level, investing in the issue early on ensures the sustainability of health systems.

Training has shown to be effective in enabling workers to quickly identify and de-escalate violence – through enhancing skills in conflict resolution and self-defense, it encourages self-confidence [52], but it has shown to be ineffective in decreasing the actual occurrence of violence [53]. Instead, multicomponent measures must be in place in order to target the root problem. Organizations should proactively create clear policy statements and response plans, enhance security measures, and improve work practices to avoid excessive stress (e.g., modifying work schedules) to protect health services before the aforementioned consequences of violence occur [48].

Especially with the advent of the pandemic, acts of violence against healthcare workers are becoming more prominent and demonstrated that aside from measures in the hospital, policymakers, law enforcement agencies, media and other civil society organizations have to work together to ensure the safety of health workers [54]. In the long term, increasing public awareness of the indirect costs of violence, filling in gaps within the legislation to ensure fair consequences against perpetrators of violence, and maintaining society's trust in healthcare workers, can further safeguard health systems from violence [46][54].

3. **Legal framework:**

International Human Rights law and International criminal law are some of many international laws related to armed conflict, but at the forefront of all is International humanitarian law (IHL), which by definition is “a set of rules that seeks, for humanitarian reasons, to limit the effects of armed conflict. It protects persons who are not, or are no longer, directly or actively participating in hostilities and imposes limits on the means and methods of warfare”. It must be applied at all times during an armed conflict, as it protects those who are not or no longer engaged in conflict. IHL is also known as “the law of war” or “the law of armed conflict” [55]. IHL binds all parties involved in an armed conflict, including non-state groups, and all parties involved have the same rights and obligations towards it. In this regard, it differs from international human rights law, which primarily targets states [56]. On the contrary, international human rights law applies at all times, i.e., in both conflict and non-conflict situations. Despite their scope differences, international human rights law provides complementary protection to parties adversely affected by armed conflicts.

Unfortunately, violations of international humanitarian law and human rights law are relatively common in many armed conflicts, such as wilful murder of civilians, rape and other forms of sexual violence, denial of humanitarian relief efforts and using human shields [56][57]. Grave violations of International Humanitarian Law can transcend into international crimes that fall under international criminal law, which constitutes war crimes, crimes against humanity, genocide and aggression. However, that is not always the case, and not every violation of IHL falls under that category [58]. Special courts, however, have been set up to prosecute domestic and international crimes, as reported in Kosovo, Bosnia Herzegovina, East
Timor, Sierra Leone, Cambodia, and most recently in Lebanon. These international (and mixed) criminal tribunals may contribute to the developing and clarifying international humanitarian law and human rights law. The decision by the international community in 1998 to establish the International Criminal Court also attempted to address these concerns, providing a means for taking up cases that States are unable or unwilling to prosecute [59].

On paper, all parties involved in an armed conflict have an obligation toward international humanitarian law and should have respect for it. Despite this, sanctions filed against IHL violations generally tend to fail. National prosecutions for grave breaches of international humanitarian law remain marginal, few and far between [60]. Civilians are the primary victims. They risk being displaced, injured, or dying. Civilians are frequently attacked, used as shields, or have their food, water, and shelter destroyed. Women, children, and other vulnerable groups are the most affected.

![Figure 3: Regional Breakdown Of Children Living In Conflict Zones](image)

These events unequivocally demonstrate the importance of strictly enforcing international humanitarian law to protect human life and dignity. This is the responsibility of all states and parties to an armed conflict. Whether it is traditional inter-State warfare or the growing number of internal, non-international armed conflicts, the ICRC believes that respect for and practical application of IHL is critical in today's armed conflicts. The problem of protecting human life and dignity in such situations stems from a failure to follow the rules of warfare, not from a lack of regulations. As a result, the ICRC works tirelessly to ensure greater compliance with the law, beginning with the primary obligation under article 1 of the Geneva Conventions on all States and other parties to an armed conflict to respect and ensure respect for IHL [61].
4. Research and data collection in attacks on health

For more than 11 years, Healthcare attack data has been systematically collected, but the data cannot be determined after every attack or across all regions. According to the WHO, there's a knowledge gap on the impact of attacks, which should be a priority for data collection [62]. In 2019, a review of more than 233 articles showed the limitations of systematic data collection on the impacts of attacks on healthcare [63]. Also, there is no clear differentiation between the impacts of attacks on healthcare and the impact of conflicts on health [63].

Detailing the phenomenon of the attacks characterizes more data collection than the description of the impacts as a methodology to describe the attacks on medical care [64]. Facilities damaged and human lives lost from attacks reveal the impact of attacks on healthcare. However, the analysis of the indirect impact on the health of the population affected by the disaster that otherwise would have benefited from medical care remains unclear [62].

Data exist largely in Syria, Yemen, and the Occupied Palestinian Territories. Still, it does not appear in other regions since there are no adequate resources for the systematic and standardized collection and representation of local/national organizations [64]. Likewise, in low-profile conflict regions, there are fewer attacks on medical care, so the data and description of the attacks are not collected [63].

In 2017, WHO adopted the development of the Surveillance System of Attacks on Healthcare (SSA), tasked with collecting and disseminating primary data on attacks on healthcare systems to understand the nature, scope, and magnitude of the attacks [62][65]. In an analysis of three years of data from the WHO SSA (2018 to 2020), the changes in the local health response context were considered an important factor in the annual data differences. Also, they are closely related to the nature and dynamics of the attacks [66]. Although the data obtained by the SSA has the protection of the confidentiality of the sources, information on the affected health resources, types of attacks, and the number of affected people can be publicly available [67].

The WHO still presents political obstacles to the collection and dissemination of data collected by the SSA [68]. There are methodological challenges, such as not including contextual data in the event description. Besides, there is a lack of harmonization of data with other monitoring efforts and the absence of an independent evaluation to assess the accuracy of the data [68]. While implementing SAA in more countries, it is important to analyze risk factors, attack patterns, and implications to strengthen healthcare attack mitigation strategies.

The WHO established a stable surveillance system to enable a better global response during the COVID-19 pandemic and to protect healthcare in countries affected by conflict or acts of violence [69]. SSA helped to gain a greater understanding of attacks, using data on specific COVID-19 attacks [70]. There was evidence of increased attacks on health facilities, transport, and patients after the start of the COVID-19 pandemic [69]. It is essential to foster a communication and outreach campaign to help governments address attacks on healthcare, as evidenced in reports by the Safeguarding Health in Conflict Coalition and Insecurity Insight, among others [71][72].

Data on the impacts of attacks on healthcare are now available, but we still need systematic methods to produce comprehensive and long-term data sets. The current data shows the consequences of the provision of medical care and the surrounding populations’ health. There are no full descriptions of the
impact the attacks on healthcare have [73].

5. Strengthening frameworks for the protection of health services

International legal frameworks were introduced due to the alarming increase in healthcare attack incidents in 2021 due to conflicts occurring in different countries [74]. Examples of initiatives conducted are the adoption of resolution 65.20 in 2012 by the World Health Assembly (WHA), which called for stakeholders to take action on the following points:

- Increasing risk management and emergency preparedness;
- Strengthening health recovery and coordination;
- Developing operations to collect and publicize data on healthcare and patient attacks during emergencies [75].

With the initiation of the SSA, political initiatives were started, such as the adoption of Resolution 2286 on the protection of healthcare during conflicts in 2016 by the UN Security Council (UNSC), which demanded all armed forces follow humanitarian law and human rights [76].

The International Committee of the Red Cross and Red Crescent (ICRC) worked on promoting International Humanitarian Law and International Human Rights Law and advocated for integrating the law into practical measures and created a booklet to educate about the integrating process, which focused on three main pillars: national implementation and dissemination of law, integrating the law with the four elements of armed forces demonstrated in the graphic below, and lastly, discusses how ICRC can improve their promotion for lawful behavior [77].

![Figure 4: Image From ICRC Booklet ‘Integrating the Law’](image)

Moreover, the ICRC created a guide with holistic recommendations to protect healthcare that can be applied and adapted by different entities. The guide's most significant recommendations revolved around creating a legal framework, promoting the health professionals’ rights, elevating the ICRC response, ensuring better-organized response and operations during conflict and emergencies, recruiting armed forces to protect healthcare safety, and engaging public figures in actions. All aspects were covered to ensure comprehensive healthcare safeguarding [78].

To protect female front-line health workers during the COVID-19 pandemic, in 2020, the UN General Assembly adopted Resolution 75/156. It attempts to get proper measures to address the particular physical, mental and psychological health needs and assistance for women and girls in healthcare settings. This resolution aims to develop a secure and violence-free working habitat for them [79].

The Working for Health 2022-2030 WHO Action Plan highlights the importance of protecting and safeguarding the health and well-being of healthcare personnel through supportive frames and surroundings. It takes active measures to realize a gender-equitable and inclusive workforce [17].
Key areas that reflect The Action Plan are:

- to smooth women's economic inclusion, together with wide-scale investment in the care economy and equal pay;
- to raise levels of funding for social protection;
- to benefit from female workforce participation;
- to develop labor market outcomes for youth [17].

These action areas lead to healthier people, increase health security and create more inclusive communities when implemented in national policies, strategies and plans [17].

World Health Assembly (WHA) Resolution 74.14: <<Protecting, safeguarding, and investing in the health and care workforce>> in 2021 calls for a set of actions to fasten the expenditures in health worker education, skills, employment, safeguarding and protection to 2030. It focuses on finding solutions to health and care workforce challenges worldwide, especially in fragile conflict-affected states [80].

During the COVID-19 pandemic, ICRC reported several incidents in the hospitals. To strengthen the protection given by IHL, ICRC proposed States engage in the U.N. Open-Ended Working Group (OEWG) initiative, studying the newest information and telecommunications developments in the context of international security, a recent norm of responsible State behavior in cyberspace. This norm forbids States to lead or consciously aid cyber activity that would damage medical services or facilities. States
should actively protect medical services from injury [30]. ICRC encourages States to consider new norms and create better cyber protection by adding them to current law under IHL [81].

5. Role of medical students

During the COVID-19 outbreak, medical students took a primary role in healthcare because of the emergency, but that was not the first time; through history books, students have been part of the health response in past epidemics. However, their role came to an end when the situation got better. Several tasks were given to undergraduates, which helped to cover the personnel shortage in healthcare settings and consequently improve the clinical and administrative work. It is essential to recognize that medical students are future practitioners with patient responsibilities and should be allowed to fulfill them [82].

The involvement of youth in health policies is getting more relevant daily, and there is increasing recognition of the necessity of including it in medical curricula. A well-established service learning program will help gain experience and make the job of future practitioners. Some cross-sectional surveys have proved that medical students desire to be included in policy-making roles to have a better healthcare system [83].

When it comes to issues like substance misuse, sexual health and personal or mental problems, students are often the first to have access to health services and an excellent resource for consultation. Additionally, young people have developed alternative methods to deliver healthcare employing arts, music, the internet, and telephone services [84]. Youth have an important role in addressing the conditions of health services, especially in distributing health expenditures to vulnerable groups. In the past, this budget tended to be skewed toward adults and the elderly [85].

Students present the addition of identifying determinants of health and barriers around the medical records of patients where it allows them to be temporary facilitators and promoters of health or in favor of health quality and improving the care process. Some propositions stand out in the medical student to add roles to:

- Flexible time to the patient for decisions or information.
- Use of technology to share learning.
- Use a new, energetic mentality for problem-solving.

Some barriers prevent the development of additive roles in healthcare, such as economics, logistics, the pressure of productivity by the tutors in charge, and physicians with limited time of professionals who are in charge of the new roles of the students [86].
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