ISSN: 2230-9926

Available online at http://www.journalijdr.com

IJDR

International Journal of Development Research
Vol. 11, Issue, 06, pp. 48280-48287, June, 2021
https://doi.org/10.37118/ijdr.22213.06.2021

RESEARCH ARTICLE OPEN ACCESS

URBAN VIOLENCE AS A FACTOR THAT COMPROMISES ACCESS TO HEALTH SERVICES AND MEDICINES: A SCOPING REVIEW

***[1]Taynah da Silva Pinheiro, [2]Rondineli Mendes da Silva and [3]Selma Rodrigues de Castilho**

[1]Universidade Federal Fluminense – Faculdade de Farmácia, R. Dr. Mario Vianna, 523 - Santa Rosa, Niterói - RJ, 24241-000; [2]Fundação Oswaldo Cruz – Escola Nacional de Saúde Pública, Selma Rodrigues de Castilho; [3]Universidade Federal Fluminense – Faculdade de Farmácia

ARTICLE INFO

Article History:
Received 17th March, 2021
Received in revised form
11th April, 2021
Accepted 06th May, 2021
Published online 30th June, 2021

Key Words:
Access to Medicines, Access to Health Services, Health Services Accessibility, Violence, Scoping Review.

****Corresponding author:***
Taynah da Silva Pinheiro,

ABSTRACT

Violence has been considered one of the current public health problems. Among the various types of violence, urban violence has impacted the experience of those who live with armed conflicts constantly, including access to health services and medicines. This review aimed to analyze whether urban violence is a factor that compromises access to health services and medicines. Scoping review was the method selected. The search for the articles took place entirely online, in July 2019, updated in August 2020, in the main databases. Studies published between 2008 and 2019 in English, Portuguese, and Spanish were included. The analyzes sought to identify the year of publication, the methodology used, the continent of the study, and the dimension of access impacted by violence. 32 articles were selected from the 1,146 initially identified. The results indicate that urban violence is a factor that compromises access and that the dimensions of availability and accessibility are the most affected determinants in conflicting territories. However, there are still gaps to be explored, especially about access to medicines. Understanding the role of violence in access is essential for adopting strategies and developing public policies that guarantee access to services and medicines.

Citation: ***Taynah da Silva Pinheiro, Rondineli Mendes da Silva and Selma Rodrigues de Castilho.*** "Urban violence as a factor that compromises access to health services and medicines: a scoping review.*", International Journal of Development Research*, 11, (07), 48280-48287.

INTRODUCTION

Violence has been considered a public health problem for some time. In locations with high levels of violence, including urban violence, there is a direct impact on the health of the population, as well as on health expenditures (Rivara *et al*., 2019; Institute for Applied Economic Research [IPEA], 2019). There is also an increase in the demand for the development of public policies aimed at reducing violence rates. According to Souza and Minayo (1997), violence can be understood as intentional actions by an individual, group, institution, class, or nation that cause any kind of damage, whether physical, psychological, material, among others. Dahlberg and Krug (2007) not only point to the perspective of violence in wars, rebellions, terrorism, and civil unrest but also brought a classification. In the authors' view, violence can be collective, self-inflicted, and interpersonal. Regardless of the type, it is important to emphasize that violence impacts public health, as evidenced by the review by Dantas *et al*. (2010). The study could verify that some of the most discussed topics involving the theme are violence against women, health expenses, and the use and abuse of illicit drugs. This result also highlights other fields that need to be explored when it comes to violence. Although present, mainly in large cities, there is no consensus on the concept of urban violence. According to Silva (2010), "urban violence articulates a complex of practices that constitute a good part of the social conflict in Brazilian cities". However, to understand the term urban violence, it is necessary to understand the factors that build it. Violence is a social issue, it varies between cultures, societies, and also according to the historical moment. Another factor that should be pointed out is that urban violence mainly affects low-income populations (Oliven, 2010). Therefore, it is feasible to reflect on the ongoing reality of conflicts and the harm of the offer of different services in the territories that experience it, including the health services here. It is worth remembering that the World Health Organization (WHO) points to access to health services and essential medicines as one of the goals that still need to be achieved by several nations. Access, in turn, can be understood as meeting a need by the health service, when the user seeks this care, integrally and ensuring the continuity of the service (Donabedian, 1984). However, the guarantee of access depends on

determinants that can influence all the steps taken by the service user. Defined by Penchansky. and Thomas (1981), the dimensions of access considered are availability, accessibility, Accommodation affordability, and acceptability. The discussion about access is important, mainly because of the harmful consequences of lack of access for the population, especially for the poorest (Sanchez and Ciconelli, 2012; World Health Organization [WHO], 2018). Barriers that impede both access to health services and their continuity can reduce health prevention, promotion, and protection actions, consequently reducing the effectiveness of the health system. In this context, this study aims to understand whether urban violence can be considered one of the factors that compromise access to health services and essential medicines.

MATERIALS AND METHODS

This is a scoping review that aims to identify the scientific evidence available on a particular topic, in addition to possible gaps not yet covered in the literature according to the results presented (The Joanna Briggs Institute [JBS], 2015). This type of review tends to ask less specific questions and does not assess the quality of selected studies (Arksey, 2005). This review was based on the question "is there compromised access to health services and essential medicines due to the influence of urban violence?". And then, it is also questioned whether, with access being compromised by the urban violence factor, "which dimensions of access are most affected?". Taking into account the broad conceptualization of urban violence, there was a need to limit the concept to a view that would enable the analysis of the literature. Therefore, urban violence was defined as violence practiced by political, religious, financial interest groups or that, regardless of motivation, lead to armed conflicts and violent practices within a territorial boundary (WHO, 1996; Oliven, 2010). The literature search was entirely online, in July 2019, updated in August 2020, in the following databases: Latin American and Caribbean Center on Health Sciences Information (LILACS via VHL); US National Library of Medicine (PubMed); Online Scientific Electronic Library (SciELO) and Science Direct.

The keywords used were "access to essential medicines and health technologies", "access to medicines", "access to health services", "health services accessibility" and "violence". To separate the terms, the Boolean operator AND was applied. Time limit filters available on search platforms (2008 to 2019) were used. The terms were initially searched together. However, when trying to search with each term separately, it was observed that a greater number of articles were retrieved. Thus, this was the strategy adopted. This study included original articles and systematic reviews available free of charge in the aforementioned databases, as well as monographs, dissertations, and theses published between 2008 and 2019, in English, Spanish or Portuguese. Other languages were excluded from this survey. Publications in the form of letters and editorials, reports, and book chapters were also not included. Subject and author indices resulting solely from the Science Direct search were not counted. The studies identified as relevant at some point pointed to the compromised access to health services or essential medicines due to conflicts in the territories where they were carried out. Publications of different methodologies were considered, with no exclusion criteria on this aspect. The full evaluations of the selected publications were based on the reading of the title and abstract by two reviewers independently. Those who met the inclusion criteria, compatible with the topic under study, were read in full by the same reviewers, still independently. In case of doubts and disagreements, a third reviewer evaluated the selected documents. The results were tabulated in Excel spreadsheets and arranged in tables containing authors, year of publication, the continent of origin of the study, methodology, summary of the study, addressing the theme, context, some results that show compromised access, in addition to identifying the impacted access dimension, if any, according to the classification of Penchansky and Thomas (1981). It is noteworthy that some authors of the selected studies did not mention the study design, leaving the space reserved for this purpose in the table blank.

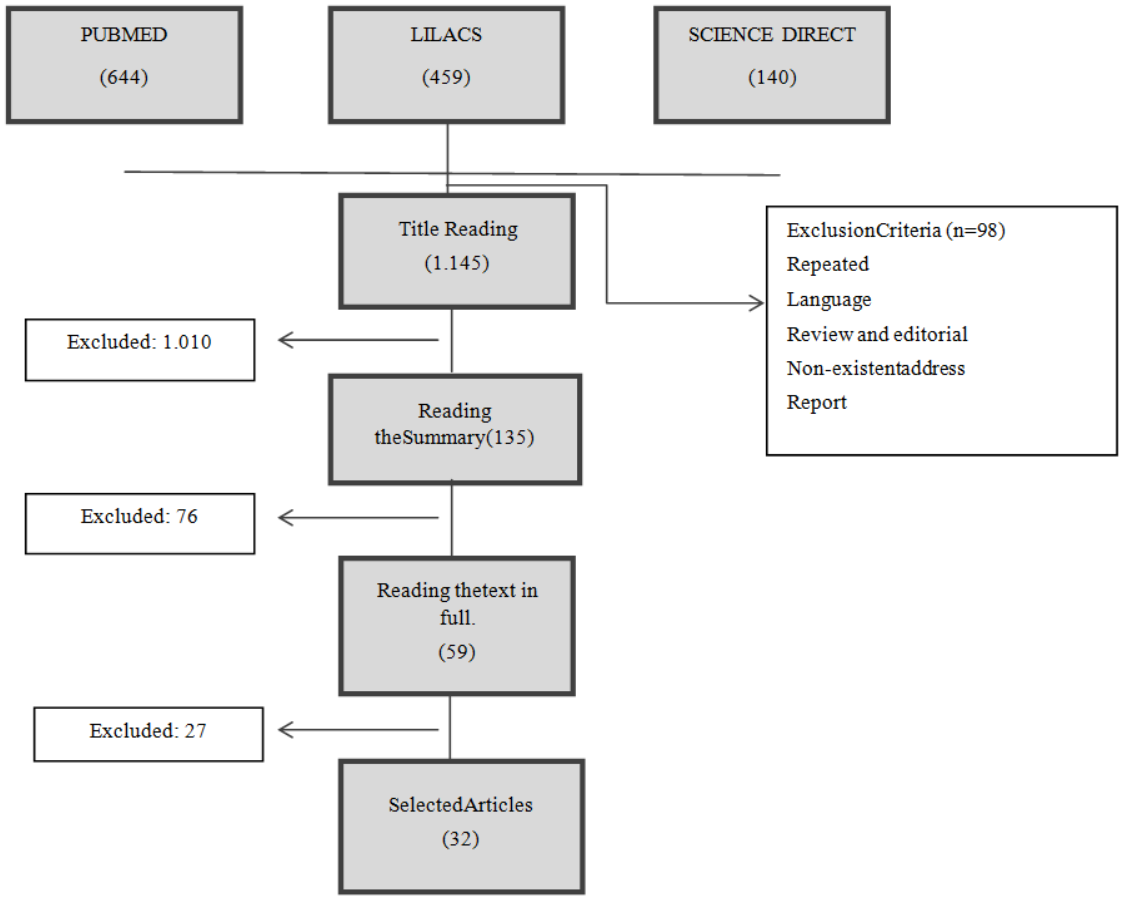
RESULTS ANALYSIS

The search resulted in 1,244 articles, of which 1,211 were excluded based on the application of the exclusion criteria (Figure 1). The SciELO search site did not provide results considered relevant to the scope of the research, being excluded from the final sample. Thus, 32 articles were selected and submitted to a full reading of the texts.The PubMed platform was the source of most retrieved articles (644), followed by the LILACS platform (459). A total of 17 selected articles were retrieved through PubMed, against 14 from LILACS and only 1 from Science Direct. The articles selected for this review can be seen in Table 1.

Source: Own elaboration.

Graph 1.Distribution of articles included in the study, according to the year of publication, N=32, 2020

General features: The selected articles were published between 2008 and 2019, with no year without publication on the topic addressed in this review. The years 2008 (Cottingham*et al*., 2008; Hanson *et al*., 2008; Kottegoda *et al*., 2008; Wayte *et al*., 2008), 2015 (Araújo, 2015; Chiavegatto *et al*., 2015; Carthaigh *et al*., 2015; Parmar *et al*., 2015; Garon and Orenstein, 2015; Geissler *et al*., 2015, Muyinda and Mugisha, 2015) and 2018 (Barbar, 2018; Fleming *et al*., 2018; Lafta and Hussain, 2018; Santos, 2018; Sawaya *et al*., 2018) were the ones that had the most publications addressing, at any given time, compromised access and urban violence, respectively. In contrast, 2009 (Ponsar *et al*., 2009), 2012 (Ud Din *et al*., 2012) and 2014 (Byrskog *et al*., 2014) were the years with the lowest number of publications on the subject, with only one study each (Graph 1). The Asian continent originated the greatest number of publications concerning access and violence (12) (Kottegoda *et al*., 2008; Wayte *et al*., 2008; Varley, 2010; Sousa and Hagopian, 2011; Ud Din *et al*., 2012; Price and Bohara, 2013; Carthaigh *et al*., 2015; Parmar *et al*., 2015; Kanwall *et al*., 2016; Lafta *et al*., 2016; Lafta and Hussain, 2018; Fahoum and Abuelaish, 2019), followed by the American continent (10) (Ponsar *et al*., 2009; Araújo, 2015; Chiavegatto *et al*., 2015; Geissler *et al*., 2015; Gonçalves *et al*., 2017; Santos *et al*., 2017; Barbar, 2018; Fleming *et al*., 2018; Santos, 2018; Sawaya, *et al*., 2018) and across the African continent (7) (Hanson *et al*., 2008; Vinck and Pham, 2010; Pyne-Mercier *et al*., 2011; Bamrah *et al*., 2013; Muyinda and Mugisha, 2015; Moise *et al*., 2017; Chukwuma and Ekhator-Mobayode, 2019). Regarding the American continent, the majority (7) (Araújo, 2015; Chiavegatto *et al*., 2015; Gonçalves *et al*., 2017; Santos *et al*., 2017; Barbar, 2018; Santos, 2018; Sawaya *et al*., 2017; 2018) of the studies originated in South America, followed by two studies (Ponsar *et al*., 2009; Fleming *et al*., 2018) from Central America and only one (Geissler *et al*., 2015) from North America. It is noteworthy that all publications from South America were Brazilian. Only one publication came from the European continent (Byrskog *et al*., 2014), with no publication from Oceania and Antarctica. Furthermore, two publications did not originate from a specific continent (Cottingham *et al*., 2008; Garon and Orenstein, 2015). Publications that address urban access and violence seem to mix different study designs.



Source: Ownelaboration.

Figure 1. Flowchart of research, review, and selection of articles in databases

Descriptive studies were the most common (16) (Kottegoda *et al*., 2008; Ponsar *et al*., 2009; Vinck *et al*., 2010; Ud Din *et al*., 2012; Bamrah *et al*., 2013; Price and Bohara, 2013; Araujo, 2015; Chiavegatto *et al*., 2015; Parmar *et al*., 2015; Geissler *et al*., 2015; Muyinda and Mugisha, 2015; Lafta *et al*., 2016; Moise *et al*., 2017; Santos *et al*., 2017; al., 2017; Lafta and Hussain, 2018; Chukwuma and Ekhator-Mobayode, 2019), followed by reviews that totaled 8 publications (Cottingham *et al*., 2008; Hanson *et al*., 2008; Wayte *et al*., 2008; Pyne - Mercier *et al*., 2011; Kanwall *et al*., 2016; Gonçalves *et al*., 2017; Barbar, 2018; Fahoum and Abuelaish, 2019). Two publications (Byrskog *et al*., 2014; Gonçalves *et al*., 2017) presented a qualitative study design and one study (Carthaigh *et al*., 2015) developed a qualitative and quantitative research combo. There was only one case report (Sawaya *et al*., 2018) among the selected studies and one opinion article (Garon and Orenstein, 2015). The other publications (Varley, 2010; Sousa and Hagopian, 2011; Fleming *et al*., 2018; Santos, 2018) formulated methodologies that mixed several methods.

Access and its determinants: Of the 32 publications selected, only three found no connection between urban violence and access to health services and medicines (Price and Bohara, 2013, Chiavegatto *et al*., 2015, Geissler *et al*., 2015). Among the health programs covered by the studies, women's reproductive health was the most cited, being the theme of ten (Cottingham *et al*., 2008; Kottegoda *et al*., 2008; Wayte *et al*., 2008; Varley, 2010; Price and Bohara, 2013; Byrskog *et al*., 2014; Lafta *et al*., 2016; Moise *et al*., 2017; Chukwuma and Ekhator-Mobayode, 2019; Fahoum and Abuelaish, 2019) of the selected publications. Vaccination also appears as a recurrent theme, contributing to four (Garon and Orenstein, 2015; Kanwall *et al*., 2016; Fleming *et al*., 2018; Lafta and Hussain, 2018) publications. HIV management is the subject of only three publications (Hanson *et al*., 2008; Pyne-Mercier *et al*., 2011; Bamrah *et al*., 2013) and mental health in only one publication (Gonçalves *et al*., 2017).

Medications were addressed by a study (Muyinda and Mugisha, 2015). Not all studies focused on a specific program, yet the number of articles that have reproductive health as a central theme is noteworthy. Regarding the determinants of access (Penchansky and Thomas, 1981), accessibility seems to be the determinant most affected by violence (Cottingham *et al*., 2008; Kottegoda *et al*., 2008; Wayte *et al*., 2008; Ponsar *et al*. , 2009; Varley, 2010; Vinck *et al*., 2010; Pyne-Mercier *et al*., 2011; Bamrah *et al*., 2013; Price and Bohara, 2013; Araújo, 2015; Carthaigh *et al*., 2015; Parmar *et al*. ., 2015; Garon and Orenstein, 2015; Geissler *et al*., 2015, Muyinda and Mugisha, 2015; Kanwall *et al*., 2016; Lafta *et al*., 2016; Gonçalves *et al*., 2017; Moise *et al*., 2017 ; Santos *et al*., 2017; Barbar, 2018; Fleming *et al*., 2018; Lafta and Hussain, 2018; Santos, 2018; Sawaya *et al*., 2018; Chukwuma and Ekhator-Mobayode, 2019; Fahoum and Abuelaish, 2019), followed by availability (Cottingham *et al*., 2008; Kottegoda *et al*., 2008; Hanson *et al*., 2008; Wayte *et al*., 2008; Varley, 2010; Sousa and Hagopian, 2011; Ud Din *et al*., 2012 ; Bamrah *et al*., 2013; Price and Bohara, 2013; Araújo, 2015; Carthaigh *et al*., 2015; Parmar *et al*. al., 2015; Garon and Orenstein, 2015; Geissler *et al*., 2015, Muyinda and Mugisha, 2015; Kanwall *et al*., 2016; Lafta *et al*., 2016; Moise *et al*., 2017; Santos *et al*., 2017; Barbar, 2018; Fleming *et al*., 2018; Lafta and Hussain, 2018; Chukwuma and Ekhator-Mobayode, 2019; Fahoum and Abuelaish, 2019).

Accommodation also appears as one of the most compromised determinants (Hanson *et al*., 2008; Varley, 2010; Sousa and Hagopian, 2011; Byrskog *et al*., 2014; Muyinda and Mugisha, 2015; Gonçalves *et al*., 2017; Santos *et al*., 2014; al., 2017; Barbar, 2018; Fleming *et al*., 2018; Sawaya *et al*., 2018). Acceptability (Varley, 2010; Byrskog *et al*., 2014; Carthaigh *et al*., 2015; Sawaya *et al*., 2018) and affordability (Ponsar *et al*., 2009; Pyne-Mercier *et al*., 2011; Price and Bohara, 2013; Carthaigh *et al*., 2015) were the least identified determinants in the selected publications.

Table 1 - Characteristics of Articles Included in the Scoping Review, N=32, 2020.

Author/Year	Origin	Study design	Description of access compromise	Identification of compromised access dimensions
Cottingham J, García-Moreno C, Reis C. (2008)	Not applicable	Review	The study indicates that women living in conflict areas have greater difficulty in accessing reproductive health. In these areas, women are more susceptible to violence, rape and are not always able to get assistance from health services.	Accessibility, Availability
Hanson BW, Wodak A, Fiamma A, Coates TJ. (2008)	Africa	Review	Some areas included in the study show an increase in the number of people infected with HIV after conflict, as conflicts destroy the infrastructure of health services. The study also indicates the development of prevention programs focused on HIV in conflict areas.	Availability, Accommodation
Kottegoda S, Samuel K, Emmanuel S. (2008)	Asia	Descriptive study	The study has as one of its results an abortion rate that varies between 14 and 24%. The authors believe that some of these may be related to a lack of access to health services. Almost 20% of births are performed at home due to the distance from hospitals, the risk involving conflicts, among other factors.	Accessibility
Wayte K, et al. (2008)	Asia	Interviews, observation, review, and analysis of documents.	Conflicts lead to changes in health planning in Timor-Leste, so that, according to the Minister of Health, only family planning and safe motherhood programs were maintained, in addition to medication and ambulance dispensing services, the latter without access. total to certain areas.	Accessibility, Availability
Ponsar, F et al. (2009)	Central America	Descriptive study	Violence was indicated as the leading cause of death between the two cities that participated in the study. Access to health services was considered limited due to insecurity and poverty, with 11 to 20% of respondents reporting not having access to health services after an episode of violence.	Accessibility, Affordability
Varley E. (2010)	Asia	Field research, participant observation, interviews, and analysis of clinical records.	The author reports how the restriction of services mainly affected Sunni patients, resulting in profoundly reduced clinical access, reduced medical coverage, and a consequent increase in maternal morbidity and mortality.	Availability, Accommodation, Acceptability, Accessibility.
Vinck, P et al. (2010)	Africa	Descriptive study	The study carried out in conflict areas in the Central African Republic shows that 50% of respondents rate their access to health services as bad or very bad. Still, 29% of respondents report that they consider their health to be bad or very bad.	Accessibility
Pyne-Mercier, LD et al. (2011)	Africa	Retrospective review	During the post-election period, there was a reduction in the number of visits to the pharmacy. Of the more than two thousand patients who were examined in the post-election period, 16% of them reported treatment interruptions.	Accessibility, Affordability
Sousa C, Hagopian A. (2011)	Asia	Participant observation, secondary data analysis, and analysis of semi-structured interviews.	The results of this study demonstrate that the Israeli occupation of the West Bank area has a considerable impact on civilians' access to preventive and urgent care. Professionals are also affected by the conflict, experiencing interruptions in their work routine, harassment, and violence.	Availability, Accommodation
Ud Din, I et al. (2012)	Asia	Descriptive study	The Taliban's influence on access to health occurs in many ways, from the prohibition of vaccination campaigns, the destruction of health facilities, the murder of health professionals, among others.	Availability
Bamrah, S et al. (2013)	Africa	Descriptive study	The study brings results that describe the reduction of access to health care after elections in Kenya, especially patients being treated for HIV. There are worrying percentages of children without access to health services and treatment interruptions in the post-election period.	Accessibility
Price JI, Bohara AK. (2013)	Asia	Retrospective descriptive study	The study reports that at times of greater intensity of conflicts, women are subjected to 0.3 to 1.5 fewer prenatal exams. This result would indicate that environmental factors such as conflicts existing in this territory can be decisive for the access and use of health services.	Accessibility, Affordability
Byrskog, U et al. (2014)	Europe	Qualitative study	Reports by Somali women about violent behavior during the war, limited access to services, difficulties in securing prenatal care, insecurities at the time of childbirth, and male doctors' limitations in attending to pregnant women.	Availability, Accommodation, Acceptability
Araújo, CM. (2015)	South America	Descriptive study	The results showed that four services studied have already experienced urban violence and for this reason, three of them refused to continue the service in these territories. One of the solutions found for this issue was the service at another address that is located in a territory free from urban violence.	Accessibility, Availability
Chiavegatto Filho AD et al. (2015)	South America	Descriptive study	One of the findings of this study is that the context of the territory, including violence here, was not relevant with access to and use of health services.	Not applicable
Carthaigh, N et al. (2015)	Asia	Quantitative and Qualitative Study	In this study, two out of three people experienced barriers to accessing health services, with conflicts between armed groups and insecurity being the main reason. One in five has someone in their family or close friend who has died due to lack of access to health services. There are also reports of lack of professionals and medication in public health services.	Accessibility, Acceptability, Availability, Affordability.

Continue ….

Parmar, B et al. (2015)	Asia	Retrospective descriptive study	After the end of conflicts, the population continues to have difficulties in accessing health services, exemplified by the prenatal care rate of 16.9%, in addition to child malnutrition and infant mortality rates that have been maintained since 2009.	Accessibility, Availability
Garon JR, Orenstein WA. (2015)	Not applicable	Opinion	The article reports that areas with higher levels of conflict have higher rates of polio, due to the difficulty of promoting vaccination in these territories.	Accessibility, Availability
Geissler, KH et al. (2015)	North America	Descriptive study.	As a result, the study shows that residents of counties bordering Mexico had less access to a health care provider. The women had not had mammograms in the previous two years. Homicide rates were not related to health access outcomes.	Accessibility, Availability
Muyinda, H; Mugisha, J. (2015)	Africa	Descriptive observational study	The focus of the study is the lack of post-conflict medications, due to the logistical difficulties presented to reach settlements in Northern Uganda. One of the main results of the problems mentioned in the patient's withdrawal from treatment due to the lack of medication, even though health professionals strive to reduce the problems of access to medication.	Acceptability, Availability, Accommodation.
Kanwal S, Hussain A, Mannan S, Perveen S. (2016)	Asia	Review	The study shows that one of the factors making polio eradication difficult in Pakistan is the political and religious issues that cause conflict. Several militant groups have professionals who are part of the vaccination program as targets of attacks and deaths, which led to the end of the vaccination campaign in 2014.	Accessibility, Availability
Lafta R et al. (2016)	Asia	Descriptive study.	Due to conflicts, the share of women interviewed with access to health services is 57.1%, considered by the authors to be restricted. Only 23% of services are accessed without the need for any type of transport. Prenatal care only available to 4% of the women interviewed.	Accessibility, Availability
Gonçalves, HCB et al. (2017)	South America	Revisão and qualitative interviews	The study presents urban violence as a cause of mental health disorders and as a barrier to their treatment. Professionals at the Psychosocial Care Centers (CAPS) say that the absence of users who live in violent territories for consultations is common, making rescheduling a recurrent practice and bringing harm to the user's treatment.	Accessibility, Accommodation.
Moise IK, Verity JF, Kangmennaang J. (2017)	Africa	Descriptive study.	The study presents results that affirm high rates of contraceptive use in areas where there is persistent post-conflict violence and reiterates that all reproductive health clinics are within a predicted radius of 4km from the city studied, which would indicate a high rate of accessibility.	Accessibility, Availability.
Santos, MS et al. (2017)	South America	Descriptive study with a qualitative approach	Professionals who took part in this study report the difficulty of access to services by users due to fights between rival gangs. In the professionals' conception, working in this situation brings health problems, leaves, and, consequently, the lack of professionals who carry out health services.	Accessibility, Accommodation, Availability.
Barbar, AEM. (2018)	South America	Review and opinion	The article mentions the impossibility of access to health services not only due to the blocking of roads or lack of security but also, indirectly, due to the lack of professionals who work in conflicting areas.	Accessibility, Accommodation, Availability.
Fleming, JA et al. (2018)	Central America	Retrospective study	Violence in El Salvador's gang-dominated communities makes it impossible for pregnant women to access influenza vaccination. Difficulty access by professionals to vaccination posts is considered an important factor for access.	Accessibility, Accommodation, Availability.
Lafta, R; Hussain, A. (2018)	Asia	Descriptive study.	The study shows that several vaccine-preventable diseases still occur at high incidence. This phenomenon occurs due to fluctuations in vaccine coverage results. The study also reports the resurgence of tuberculosis after a long period of control.	Accessibility, Availability.
Santos, R. (2018)	South America	Exploratory study with a qualitative approach	One of the results observed by the researcher is violence as a barrier to accessing health services, both because of the user's inability to reach the health unit, and because of the professional's difficulty in accessing the territory.	Accessibility.
Sawaya, AL et al. (2018)	South America	Case report	The study reports that drug trafficking and violence in favelas have been obstacles to accessing and offering health services. The case report shows a malnourished child, accompanied by the health service that did not bring to justice the threat of organized crime.	Accessibility, Accommodation, Acceptability.
Chukwuma, A; Ekhator-Mobayode UE (2019)	Africa	Descriptive study.	The article reports the impact of armed conflicts involving Boko Haram in Nigeria, where there is a reduction in visits to prenatal consultations, in addition to a reduction in births performed by a specialized professional.	Accessibility, Availability
Fahoum, K; Abuelaish I. (2019)	Asia	Review	Barriers arising from conflicts reduced access to contraceptive drugs, as well as access to hospitals, leading to a worsening in the rates of premature births, stillbirths, and maternal mortality.	Accessibility, Availability

DISCUSSION

From the 32 selected articles, it was possible to observe that access to health services and medicines is compromised by urban violence, characterized by armed conflicts in certain territories. However, it is necessary to emphasize that the relationship between access and violence was not shown to be the priority focus of most of the studies found. Only three studies found no relationship between access and urban violence. Geissler *et al*. (2015) found no connection between homicides that occurred in a study conducted in Mexico and reduced access to health services. Price and Bohara (2013), despite having found some rate of access reduction, did not confirm the relationship between this commitment and violence. A similar situation was reported by Chiavegatto *et al*. (2015). Each of the studies has particularities that may justify such results. The first study was based on homicide rates in a given territory, evaluating together with access rates. Study limitations refer to the low sensitivity for some significant access questions. The second focused on women's health and, despite the negative result for the correlation between access and violence, the authors point out the need to assess the context and suggest some alternatives to guarantee access, since a certain reduction rate was found. The third was held in the city of São Paulo, which is experiencing conflicts due to drug trafficking, currently commanded by the First Command of the Capital (PCC) in practically the entire city. There are reports that the PCC organizes itself in a business way, even acting in health services (Neves, 2019; Grupo, 2020). When it comes to the issue of access, some primary care programs can be impacted in conflict situations. Garry, Checchi, and Cislaghi (2018) identified that in the presence of urban violence, more precisely after the war in Syria, health priorities changed. Although there is an increase in cases of non-communicable chronic diseases, they end up being neglected, as emergency actions that prevent and treat infections and injuries are prioritized, including financially. Consequently, the prioritization of emergency actions to the detriment of long-term health programs ends up reducing the access of those who need treatment for chronic diseases.

The fact that health promotion and prevention programs are not a priority in conflictive environments may be the justification for several publications to address the impact of violence on them. Reproductive health/women's health, for example, was present in most studies that specifically addressed a health program. The scoping review by Belaid *et al*. (2020) on reproductive health found, in some studies, references to the difficulty of accessing health services in Sudan. Accessibility to services such as maternity hospitals, availability of medical supplies and medicines, in addition to the purchasing power to purchase medicines, were some of the compromised access dimensions identified among the interviews cited in this study. However, primary health programs are not always mentioned, as shown by Roddam *et al*. (2019) who, in a study on access inequities about multiple sclerosis, did not find an equivalent number of reports on prevention programs. Another recurring topic refers to immunization programs, possibly more affected in conflicting territories. In a recent study on the diphtheria outbreak in Yemen, the relationship between armed conflicts and prevention through immunization in these locations is addressed. There is a comparison where the probability of an outbreak is verified between the conflicted areas and those that are not under the effects of violence. The authors conclude that conflicts directly impact the effectiveness of immunization programs and increase the likelihood of diphtheria outbreaks in these locations (Dureab *et al*., 2019). Another publication points to the low rate of immunization among children in northeastern Nigeria, an area fraught with conflicts involving Boko haram. According to the results released, the chances of children born during times of conflict being vaccinated drop by almost half (Sato, 2019). It is noteworthy that, in a 2018 report, the WHO pointed out some of the challenges for reducing maternal and child mortality, as well as fighting infectious diseases such as HIV, tuberculosis, and malaria. Violence in conflicting territories is cited as one of the factors that hinder the achievement of these goals. Therefore, it is understood that the implementation of primary care programs, focused on prevention and health promotion, needs adaptations based on this context, since the most basic themes of health prevention, such as encouraging adequate nutrition, practice exercise, and combating smoking are no longer a priority in conflict areas (Garry *et al*., 2018). Some publications selected for this review point to the insecurity to which professionals working in conflicting territories are subjected (Santos, 2018; Fleming *et al*., 2018; Barbar, 2018; Santos *et al*., 2017; Kanwall *et al*., 2016; Carthaig *et al*., 2015; Ud Din *et al*., 2012; Sousa and Hagopian, 2011). Such studies have in common reports of difficulties in accessing professionals to their places of work, interruptions in care, harassment, violence, threats, and death. Gaffey *et al*. (2020) mention the same feeling of insecurity of health professionals in conflict areas for participating in their study. When participating in the study, professionals take risks by providing information to researchers, suffering threats of kidnapping and even death.

In addition, there is also the difficulty of incorporating qualified health professionals into the service, as can be seen in the scoping review by Belaid *et al*. (2020), which emphasizes the low qualification of professionals working in primary care services in Sudan, including reproductive health, reducing women's access to health services. The role of urban violence in accessing essential medicines has been addressed in only two studies (Pyne-Mercier *et al*., 2011; Muyinda and Mugisha, 2015). The studies show both the negative impact of violence on the supply of medication logistics and the consequences, such as reduced adherence to drug therapy. A set of factors determines the adherence to medications by patients and they include cost, availability, ease of geographic access, trust in the prescribing professional, clear information about the treatment to be followed, among others. The lack of any of these items seems to have a greater weight in giving up treatment continuity than the patient's will (Brown *et al*., 2016). When it comes to access to medicines, barriers are found at different levels of services, even reaching the levels that design and promote the development of Pharmaceutical Care (PC). And despite the diversity of dimensions affected by the various existing factors, when it comes to drugs, availability, accessibility, and affordability are perhaps the ones that most affect drug-dependent users. Therefore, given the importance of the topic, the number of studies retrieved in this review suggests that this is a gap to be explored since access to essential drugs is at the heart of broad discussions conducted by the WHO and the continuity of treatment for users depends on it. of the most diverse pathologies (Bigdeli *et al*., 2012; Garcia *et al*., 2019).

In terms of geographical origin, most studies were carried out in the African continent, followed by Asia, America, and, in more expressive quantities, in South America. It is known that these continents are permeated by territorial conflicts for different reasons. On the African continent, armed conflicts involve political and economic issues. In Asia, religious issues are also part of the factors that promote violence. On the American continent, border regions are the scene of territorial conflicts, conflicts over natural resources, and the policy of war on drugs. That said, Brazil was the origin of all the studies that related urban violence and access in South America. The country has been trying to combat drug trafficking installed in the most vulnerable areas, mainly in large cities, however, the numbers show that violence still permeates the reality of these territories (IPEA, 2019). Regarding the study designs, it is noted that there are many methodologies used. This reality seems to be common in access research, as can be seen in the publication by Khanassav *et al*. (2016). The authors also found diversity in terms of study design. The correlation between access and violence can be quite subjective, so that, to understand it, it is necessary to make use of different methodological approaches to elucidate the gaps that still exist on the subject. The years of publication of the studies that are part of this review are also an important parameter for reflection since, as of 2015, there was a jump in publications that at some point address issues of violence and access. Urban violence is nothing new, however, the discussion on access can be considered in this way, as its concepts date back to the 1980s. Thus, it is reasonable to assume that researchers have taken a closer look at this correlation in a more

recent moment, given the need to look at access in a more universal way, something encouraged even by the WHO. The perception of the determinants of access was another objective that this review proposed. It is important to emphasize that none of the articles mentioned the determinants, therefore, an interpretation based on the concepts proposed by Penchansky and Thomas (1981) was necessary. Accessibility and availability were the determinants of greater commitment among the selected publications. This result is corroborated by the study by Khanassav *et al*. (2016) that, even not correlating access to violence, but to primary care for vulnerable populations, had as results the most affected determinants of accessibility, availability. Ward *et al*. (2015) show that for users of primary care services in some rural areas in Australia, service availability is even more important than accessibility, emphasizing here that the considered accessibility was distance geographic location. In this same study, purchasing power was the least considered access dimension. Somehow, accessibility and availability seem to be the main dimensions of access affected, especially to primary health care, which is intended to be the "entry door", ie, the user's first contact with the health service and which covers health promotion and prevention services. This may be the reason why such determinants end up being the most observed by the authors in their research. Ensuring access to health services and medicines poses enormous challenges to those who think about public health policies. The different contexts and realities make it even more delicate to think about users' needs and ensure that they are addressed. In contexts of violence, where access to the most basic seems to be compromised, it is necessary to develop mechanisms that guarantee a minimum of health to people who possibly tend to develop infectious diseases, chronic non-communicable diseases, and mental health problems, simply because fail to approach health prevention and promotion measures.

Final Considerations

The analysis of the role of violence in the access to health services and medicines is still incipient, and it is opportune to intensify the investigations on the subject, Several places experience territorial conflicts daily for different reasons, and it is possible to observe evidence of reduced access to various services in these territories, including health services. But some gaps can still be observed, such as the focus on access to essential medicines, as well as other health programs less mentioned in selected studies, such as HIV and Tuberculosis, for example. Specifically, concerning the impact of urban violence on access to medicines, it is noteworthy that these constitute one of the main technologies used in health care. In addition, adherence to drug treatments is identified as one of the requirements for achieving the therapeutic results expected from drug therapy, especially for those with non-degenerative chronic diseases. Thus, with an impact on access to medicines, it is possible to consider that there is potential harm to the effectiveness of health actions involving the use of medicines. Understanding the role of violence in the dynamics of access to medication is a fundamental condition for the adoption of strategies that can minimize barriers to the implementation of PA policies. Thus, it is opportune to intensify research efforts in this area.

REFERENCES

Araújo CM 2015. Assistência Domiciliar de Saúde: Desafios no atendimento aos usuários do SUS que residem em área de violência urbana. Master's Dissertation, Sérgio Arouca National School of Public Health, Rio de Janeiro, RJ, Brazil.

Arksey H, O'Malley L 2005. Scoping studies: towards a methodological framework. Int J Soc Res Methodol. 8 1, 19-32.

Bamrah S, Mbithi A, Mermin JH, Boo T, Bunnel RE, Sharif SK, Cookson ST 2013. The impact of post-election violence on HIV and other clinical services and on mental health – Kenya, 2008. Prehospital and Disaster Medicine. 28 1: 43-51. doi:10.1017/S1049023X12001665

Barbar AEM 2018. Atenção primária à saúde e territórios latino-americanos marcados pela violência. Rev Panam Salud Publica. 42: e142. 1-5. Retrieved on October 15, 2019, from https://www.scielosp.org/pdf/rpsp/2018.v42/e142.

Belaid L, Bayo P, Kamau L, Nakimuli E, Omoro E, Lobor R, Samson B, Dimiti A 2020. Health policy mapping and system gaps impeding the implementation of reproductive, maternal, neonatal, child, and adolescent health programs in South Sudan: A scoping review. Confl Health. 24 1: 1-16. doi:10.1186/s13031-020-00258-0

Bigdeli M, Jacobs B, Tomson G, Laing R, Ghaffar A, Dujardin B, Damme WV 2013. Access to medicines from a health system perspective. Health Policy Plan, 28 7: 692-704. doi:10.1093/heapol/czs108

Brown MT, Bussell J, Dutta S, Davis K, Strong S, Mathew S 2016. Medication Adherence: Truth and Consequences. Am J Med Sci, 351 4: 387-399. doi:10.1016/j.amjms.2016.01.010

Byrskog U, Olsson P, Essén P, Allvin MK 2014. Violence and reproductive health preceding flight from war: accounts from Somali born women in Sweden. BMC Public Health. 15 892: 1–11.

Carthaigh NN, Gryse BD, Esmati AS, Nizar B, Overloop CV, Fricke R, Bseiso J, Baker C, Decroo T, Philips M 2015. Patients struggle to access effective health care due to ongoing violence, distance, costs and health service performance in Afghanistan Niamh. Int Health. 7: 169–175.

Chiavegatto ADPF, Wang YP, Malik AM, Takaoka J, Viana MC, Andrade LH 2015. Determinantes do uso de serviços de saúde: análise multinível da Região Metropolitana de São Paulo. Public health. 49: 15.

Chukwuma A, Ekhator-mobayode UE 2019. Armed conflict and maternal health care utilization: Evidence from the Boko Haram Insurgency in Nigeria. Soc Sci Med. 226: 104-112. doi:10.1016/j.socscimed.2019.02.055

Cottingham J, García-Moreno C, Reis C 2008. Sexual and reproductive health in conflict areas: the imperative to address violence against women. International Journal of Obstetrics and Gynaecology, 115 3: 301–303.

Dahlberg LL, Krug EG 2007. Violence: a global public health problem. Science Health Collect. 11 Suppl.: 1163-1178.

Dantas RAN, Farias GM, Rocha KDMM, Costa I, Medeiros RC 2010. The impact of violence in public health: literature review. Rev Enferm UFPE line. 4 4: 1935. doi:10.5205/reuol.1480-10071-1-le.0404spe201013

Dureab F, Al-Sakkaf M, Ismail O, Kuunibe N, Krisam J, Müller O, Jahn A 2019. Diphtheria outbreak in Yemen: The impact of conflict on a fragile health system. Confl Health. 12 1: 1-7. doi:10.1186/s13031-019-0204-2

Donabedian A 1984. La Calidad de La Atención Médica: Definicón e Métodos de Evaluación. México: La Prensa Médica Mexicana.

Fahoum K, Abuelaish I 2019. Occupation, settlement, and the social determinants of health for West Bank Palestinians. Med Confl Surviv. 1-19. doi:10.1080/13623699.2019.1666520

Fleming JA, Baltrons R, Rowley E, Quintanilla I, Crespin E, Ropero AM, Ortiz JR, Lambach P, Neuzil KM, Stepanchak M, Hombach J, Bhat N 2018. Implementation of maternal influenza immunization in El Salvador: Experiences and lessons learned from a mixed-methods study. Vaccine. 36 28: 4054–4061.

Gaffey MF, Ataullahjan A, Das JK, Mirzazada S, Tounkara M, Dalmar AA, Bhutta ZA 2020. Researching the delivery of health and nutrition interventions for women and children in the context of armed conflict: lessons on research challenges and strategies from BRANCH Consortium case studies of Somalia, Mali, Pakistan and Afghanistan. Confl Health. 24 1: 1-7. doi:10.1186/s13031-020-00315-8

Garon JR., Orenstein WA 2015. Overcoming barriers to polio eradication in conflict areas. The Lancet Infectious Diseases. 15 10: 1122–1124.

Garcia MM, Barbosa MM, Silva RM, Reis EA, Alvares J, Acurcio FA, Godman B, Junior AG 2019. Indicator of access to medicines in relation to the multiple dimensions of access. J Comp Eff Res. 8 12: 1027-1039. doi:10.2217/cer-2019-0031

Garry S, Checchi F, Cislaghi B 2018. What influenced provision of non-communicable disease healthcare in the Syrian conflict, from policy to implementation? A qualitative study. Confl Health. 22 1: 1-10. doi:10.1186/s13031-018-0178-5

Geissler KH, Becker C, Stearns SC, Thirumurthy H, Holmes GM 2015. Exploring the association of homicides in northern Mexico and healthcare access for US residents. J Immigr Minor Health. 17 4: 1214–1224.

Gonçalves HCBG, Queiroz MR, Delgado PGG 2017. Violência urbana e saúde mental: desafios de uma nova agenda?. Fractal: Journal of Psychology. 29 1: 17–23.

GRUPO ligado ao PCC atua em contratos na Grande SP, aponta investigação, Folha de São Paulo. São Paulo. Recovered on Aug 18, 2020, from https://www1.folha.uol.com.br/cotidiano/2020/08/grupo-ligado-ao-pcc-atua-em-contratos-na-grande-sp-aponta-investigacao.shtml

Hanson BW, Wodak A, Fiamma A, Coates TJ 2008. Refocusing and prioritizing HIV programmes in conflict and post-conflict settings: funding recommendations. AIDS. 22 Supl. 2: S95–103.

Instituto de Pesquisa Econômica aplicada [IPEA] 2019. Atlas Da Violência. Fórum Brasileiro de Segurança Pública. Brasília: Rio de Janeiro: São Paulo. 116p.

The Joanna Briggs Institute. 2015. Joanna Briggs Institute Reviewers' Manual: 2015 edition / Supplement, Australia.

Kanwall, S, Hussain A, Mannan S, Perveen S 2016. Regression in polio eradication in Pakistan: A national tragedy. J PakMed Assoc. 66 3: 328–333.

Khanassov V, Pluye P, Descoteaux S, Haggerty JL, Russel G, Gunn J, Levesque J 2016. Organizational interventions improving access to community-based primary health care for vulnerable populations: a scoping review. Int J Equity Health. 15 168: 1-34. doi:10.1186/s12939-016-0459-9

Kottegoda S, Kumudini S, Emmanuel S 2008. Reproductive Health Concerns in Six Conflict-Affected Areas of Sri Lanka. Reproductive Health Matters. 16: 75–82.

Lafta R, Aflouk NA, Dhiaa S, Lyles E, Burnham G 2016. Needs of internally displaced women and children in Baghdad, Karbala, and Kirkuk, Iraq. PLoS Currents. 10 8: 1-17.

Lafta R, Hussain A 2018. Trend of vaccine preventable diseases in Iraq in time of conflict. Pan African Medical Journal. 31 130: 1–10.

Minayo MCS, Souza ER 1997. Violência e saúde como um campo interdisciplinar e de ação coletiva. Hist. cienc. saude-Manguinhos. 4 3: 513-531.

Moise IK, Verity JF, Kangmennaang J 2017. Identifying youth-friendly service practices associated with adolescents use of reproductive healthcare services in post-conflict Burundi: a cross-sectional study. International Journal of Health Geographics. 26 2: 1-15.

Muyinda H, Mugisha J 2015. Stock-outs, uncertainty and improvisation in access to healthcare in war-torn Northern Uganda. Social Science and Medicine. 146: 316–323.

Neves ABSS. 2019. Atores não estatais-violentos no Brasil como desafios à paz: um estudo de caso sobre o conflito entre Comando Vermelho e Primeiro Comando da Capital 2016-2018. Graduation Completion Work. Federal University of Paraíba, João Pessoa, PB, Brazil.

Oliven RG 2010. Violência e Cultura no Brasil. Rio de Janeiro: Centro Eldestein de Pesquisa Social.

Parmar PK, Barina CC, Low S, Tun KT, Otterness C, Mhote PP, Htoo SN, Kyaw SW, Lwin NA, Maung C, Moo NM, Oo EKS, Reh D, Mon NC, Singh N, Goyal R, Richards AK 2015. Health and Human Rights in Eastern Myanmar after the Political Transition: A Population-Based Assessment Using Multistaged Household Cluster Sampling. Plos One. 10 5: e0121212. 2015. Recovered on October 15, 2019, from https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0121212.

Penchansky DBA, Thomas JW 1981. The concept of access – definition and relationship to consumer satisfaction. Med Care. 19: 127-40.

Ponsar F, Ford N, Herp MV, Mancini S, Bachy C 2009. Mortality, violence and access to care in two districts of Port-au-Prince, Haiti. Conflict and Health. 3 4: 1-6. https://doi.org/10.1186/1752-1505-3-4.

Price JI, Bohara AK 2013. Maternal health care amid political unrest: the effect of armed conflict on antenatal care utilization in Nepal. Health Policy and Planning. 28: 309–319.

Pyne-Mercier LD, John-Stewart GC, Richardson BA, Kagondu NL, Thiga J, Noshy H, Kist N, Chung MH 2011. The consequences of post-election violence on antiretroviral HIV therapy in Kenya. AIDS Care. 23 5: 562–568.

Rivara F, Adhia A, Lyons V, Massey A, Mills B, Morgan E, Simckes M, Rowhani-Rahbar A 2019. The Effects Of Violence On Health. Health. 38 10: 1622-1629. doi:10.1377/hlthaff.2019.00480

Roddam H, Rog D, Janssen J, Wilson N, Cross L, Olajide O, Dey P 2018. Inequalities in access to health and social care among adults with multiple sclerosis: A scoping review of the literature. Mult Scler Relat Disord. 28: 290-304. doi:10.1016/j.msard.2018.12.043

Sanchez RM, Ciconelli RM 2012. Conceitos de acesso à saúde. Rev Panam Salud Publica/Pan Am J Public Heal. 31 3: 260-268. doi:10.1590/S1020-49892012000300012

Sawaya AL, Albuquerque MP, Domenes SMA 2018. Violência em favelas e saúde. Advanced Studies. 32 93: 243–250.

Santos RS 2018. A violência no território da unidade de saúde da família, a formação e a prática de profissionais – uma abordagem socioclínica institucional. Professional Master's Thesis, Universidade Federal Fluminense, Niterói, RJ, Brasil.

Santos MS, Silva JG, Branco JGO 2017. O enfrentamento à violência no âmbito da estratégia saúde da família: desafios para a atenção em saúde. Brazilian Journal on Health Promotion. 30 2: 229–238.

Sato R. 2019. Effect of armed conflict on vaccination: Evidence from the Boko haram insurgency in northeastern Nigeria. Confl Health. 13 1: 1-10. doi:10.1186/s13031-019-0235-8

Silva LAM 2010. "Urban violence", public safety and slums-the case of Rio de Janeiro today. Cad CRH. 23 59: 283-300. doi:10.1590/s0103-49792010000200006

Sousa C, Hagopian A 2011. Conflict, health care and professional perseverance: A qualitative study in the West Bank. Global Public Health. 6 5: 520–533.

Ud Din I, Mumtaz Z, Ataullahjan A 2012. How the Taliban undermined community healthcare in Swat, Pakistan. BMJ. 344: e2093–e2093.

Varley E. 2010. Targeted doctors, missing patients: Obstetric health services and sectarian conflict in Northern Pakistan. Social Science and Medicine. 70 1: 61–70.

Vinck P, Pham PN 2010. Association of Exposure to Violence and Potential Traumatic Events with Self-reported Physical and Mental Health Status in the Central African Republic. JAMA. 304 5: 544–552.

Ward B, Humphreys J, McGrail M, Wakerman J, Chisholm M 2015. Which dimensions of access are most important when rural residents decide to visit a general practitioner for non-emergency care?, Aust Heal Rev. 39 2: 121-126. doi:10.1071/AH14030

Wayte K, Zwi B, Belton S, Martins J, Martins N, Whelan A, Kellan PM 2008. Conflict and Development: Challenges in Responding to Sexual and Reproductive Health Needs in Timor-Leste. Reproductive Health Matters. 16 31: 83–92.

World Health Organization [WHO] 1996. Global Consultation on Violence and Health. Violence: a public health priority. Geneva.

World Health Organization [WHO] 2018. World Health Statistics 2018: monitoring health for the SDGs, sustainable development goals. Geneva. Recovered on December 8, 2019, from https://www.who.int/gho/publications/world_health_statistics/2018/EN_WHS2018_TOC.pdf?ua=1.

****