1 Review

2 Prevalence of sexual violence in migrants, applicants

for international protection and refugees: a critical

4 interpretive synthesis of the evidence.

- 5 Lotte De Schrijver¹, Tom Vander Beken ², Barbara Krahé ³ and Ines Keygnaert ^{1*}
- UGent-International Centre for Reproductive Health, Belgium; lotte.deschrijver@ugent.be;
 ines.keygnaert@ugent.be
- 8 ² UGent-Institute for International Research on Criminal Policy, Belgium; tom.vanderbeken@ugent.be
- 9 ³ University of Potsdam, Germany; krahe@uni-potsdam.de
- * Correspondence: lotte.deschrijver@ugent.be; Tel.: +32-09-332-38-67

Abstract: 1) Background: Sexual violence (SV) is a major public health issue with negative socio-economic and physical, mental, sexual and reproductive health consequences. Migrants, applicants for international protection and refugees (MAR) are identified as a vulnerable group for SV. Since many European countries have been confronted with high migratory pressure, developing prevention strategies and care paths focusing on those MAR affected by SV is needed. To this end, this study reviews evidence on the prevalence of SV among MAR groups in Belgium. 2) Methods: A critical interpretive synthesis was applied to 25 peer-reviewed articles and 22 grey literature documents based on the socio-ecological model. 3) Results: The evidence shows that prevalence rates of SV are high among MAR in Belgium, but comparable prevalence data are lacking. Several challenges for conducting prevalence studies SV in this population are identified and discussed. 4) Conclusions: Sexual violence in MAR in Europe is probably more frequent than in the general population, however representative studies confirming this hypothesis are lacking. Future research should start with a clear definition of the concerned population and acts of SV to generate comparable data. Participatory qualitative research approaches should be applied to fully grasp the complexity of interplaying determinants of SV in MAR.

Keywords: sexual violence; migrants; refugees; asylum seekers; Europe; prevalence; Belgium

1. Introduction

Sexual violence (SV) is a major health, judicial and societal concern [1, 2] and can have numerus serious short- and long-term physical, psychological and social consequences for victims, but also for family members, peers and assailants [1, 3-5]. It is a global and serious public health and human rights problem [5]. SV occurs all over the world, in all cultures, on every societal level, among people from all genders and in all age categories [1]. Regardless of the context in which SV occurs, during war and conflict, within an intimate partnership, larger family or community structure, it is considered as a deeply violating and painful experience for those affected [5]. SV can be broadly defined as a range of behaviours including sexual harassment, sexual violence without penetration, attempted and completed rape which can occur in a myriad of contexts and relationships [6]. It includes victimization, perpetration and the witnessing of transgressive and violent sexual acts taking place between both strangers or in close and/or intimate relationships, motivated by individual or political reasons, in the context of conflict, exploitation or targeting a specific group [7]. In this paper we will the term SV to refer to this broad range of behaviour. However, since there is an inconsistency in the use of terms referring to SV, we will use the terminology used in the original papers in the "results" section in order to avoid misinterpretations.

Both scientific and grey literature identify applicants for international protection and refugees as being specifically vulnerable for SV exposure [8, 9]. However, the extent to which this vulnerability might impact the prevalence of SV is not yet made clear. There seems to be a lack of qualitative and comparable research on this topic.

In the last decade, the world has seen an increase in people who have been forced to flee from home. In 2014, UNHCR counted 59,5 million forcibly displaced people worldwide, which is a 16% increase compared to the previous year [10]. The numbers have gone up since then. Today, the UN Agency estimates that 65,6 million men, women and children have been forced to leave their home country. This figure includes 22,5 million refugees, of whom over half are minors under the age of 18 [11].

The terms "migrant", "asylum seeker/applicants for international protection" and "refugee" are often considered as synonyms but refer to different populations. In this paper, the definitions proposed by UNHCR will be used. A migrant is someone who consciously and voluntary decides to leave his/her country of origin and who could decide to go back without having to fear for their safety. Others who leave their home country do not have that option [12]. Asylum seekers or applicants for international protection flee their home country and are awaiting a decision on their request for international protection [12]. Refugees are those applicants that received a positive decision regarding their request for international protection. The abbreviation MAR will be used here to refer to migrants, applicants for international protection and refugees. Although the focus of this study is mainly on the latter two, the term migrant is also included, because a migrant may have been an applicant or refugee in the past.

Although the number of applications for international protection has recently declined, the group of applicants and refugees still remains a group not to be neglected. Regardless of their legal status, one fifth of the Belgian population is of a foreign descent and 11 per cent have another nationality [13]. Even with its long history as a migratory transit and/or destination country, the high numbers of MAR confront Belgium with some challenges. One of them is the responsibility to guard, guarantee or aid in achieving the health and well-being of MAR.

To take up this responsibility, a clear overview of the specificities regarding a populations experienced threats to health and wellbeing should be identified in order to develop and provide adequate and appropriate care. In order to contribute to the creation of an overview of specific sexual health threats in this population, we want to zoom in on the case of SV in MAR in Belgium. It is essential to research the impact of SV on the lives of those belonging to vulnerable groups in order to contribute to a better understanding of the mechanisms involved and to provide recommendations with the eye on improving the health and wellbeing of all individuals belonging to this group. A first step in this research chain is to estimate the magnitude of the problem in this population. The objective of this study is to critically identify the evidence on the prevalence of SV in MAR in Belgium and to discuss the challenges of conducting research on this topic in this specific population in the light of future prevalence studies. To address the study objectives, this review will look into prevalence studies on SV in MAR in Belgium through the method of a Critical Interpretive Synthesis (CIS).

2. Methods

2.1 Critical interpretive synthesis

In order to critically discuss the evidence and challenges of SV prevalence research in MAR, we opted to conduct a Critical Interpretive Synthesis (CIS). Whereas a systematic review aims to answer a specific research question by collating all empirical evidence that match predefined criteria for eligibility [14] and proves to be an excellent technique for presenting an overview of the relevant evidence on a given topic in an explicit and systematic manner [14], it lacks a critical synthesis of what these findings contribute to the construction of new theoretical frameworks [15]. The focus of a CIS on the other hand lies mainly on understanding phenomena and theory construction through an inductive and interpretive combination of constructs and evidence from different approaches and

study fields resulting into a new coherent whole [15]. This methodology allows us to integrate different kinds of sources, regardless of whether they are peer reviewed or grey literature, and to add a qualitative dimension to it [15]. New theories and concepts emerging as a result of a CIS may serve as a starting point for future studies [15].

To answer the predetermined research objectives, we synthesized and approached the literature through the lens of the socio-ecological model. This model [16, 17] can be used to approach SV from a perspective in which four interlinked levels play a key role. It suggests that the interactions between the individuals and their environment shape their development over time [16]. Within a complex system of relationships affected by multiple levels of the surrounding environment [17], research on SV takes place in a social context. These interactions between different social contexts can be categorized in various systems.

At the centre of the model, we find the intrapersonal processes taking place within the individual itself. These internal processes are bi-directionally influenced by the immediate surrounding of the individual. The relationship between the individual and its direct context is in turn affected by the relationships between several different microsystems within a community. And again, on an even higher level, communities are influenced by processes taking place at society and public policy level [16, 17].

Starting from this model, we begin by looking at relevant factors in the light of SV prevalence in MAR identified on a societal and public policy level in order to continue with a more narrow organisational and community level, followed by challenges at interpersonal and eventually the individual level.

2.2 Sample of studies

Between May 1th and August 31th, 2017, we selected peer-reviewed articles relevant to the research objectives of this study through a database search. This search action was part of a larger study called "UN-MENAMAIS" and took place simultaneously with the search action for a CIS on the risk factors and consequences of SV and help-seeking behaviours after SV victimization in MAR. These results will be presented elsewhere.

Although our main interest in this paper is on SV in MAR in Belgium, we expected the number of studies in Belgium to be limited and thus broadened our review to Europe. The inclusion criteria used were the following: papers on SV in MAR in Europe published after 2000 in English, French or Dutch were included. Any author's definition of sexual violence (i.e., rape and any other form of sexual violence) was accepted, but studies that combined sexual and non-sexual violence into one category in the analysis were excluded in order to maximize the comparability of the prevalence numbers. However, we did use these sources in order to have a deeper sense of the background concerning the issue of SV in MAR. If different forms of violence were studied in one single study and conclusions about SV could be distinguished from the other types of violence, the paper was still included. The MeSH terms and key words presented in Table 1 were used in different combinations and databases.

Table 1. Search terms.

MeSH terms	Keywords	Databases	Alerts
Prevalence; sex	Sexual violence; rape;	PubMed	Crimpapers
offences; child abuse;	sexual assault; sexual	Google Scholar	Science Direct
sexual human	abuse; child abuse; human	Science Direct	
trafficking; rape;	trafficking; sexual		
refugees; transients and	exploitation; forced		
migrants; sexual	prostitution; sexual		
minorities;	harassment; sexual		
	slavery; attempted rape;		
	refugees; asylum seekers;		

migrants; undocumented migrants; legal status; irregular; illegal; LGBTI; conflict related sexual violence; war; EU; Europe; high-income countries; Western countries; help-seeking; help-seeking behaviour; disclosure; selective disclosure; health care; access; barriers;

In addition to peer-reviewed articles, we also considered grey literature. With the term grey literature we refer to those documents that have not undergone the process of peer reviewing and/or are not included in bibliographical retrieval system, but are considered unconventional materials which often remain unpublished and limited in distribution [18, 19]. It includes reports of different natures, theses, technical specification, standards and guidelines, official documentation and so on [18]. These sources were derived from the reference lists of studies used in the first phase and sources provided by experts and alerts. From the 138 identified documents, we ultimately included 25 peer-reviewed articles and 22 grey literature documents in the CIS on the prevalence of SV in MAR in Europe presented here. To have an idea of the prevalence of SV in MAR in EU, only papers mentioning prevalence numbers in EU were included for analysis. Figure 1 presents the selection algorism used in this CIS.

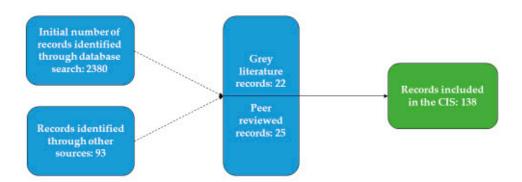


Figure 1. Selection algorism

3. Results

Research shows that in comparison to the general population, refugees and applicants for international protection are more vulnerable to be exposed to SV [2, 20-22]. However, compared to the attention given to SV in the general population, research on SV in MAR is extremely scarce. Several reasons could be prompted to explain the lack of research on the topic in this specific

3.1 Prevalence of SV in migrants, applicants for international protection and refugees

- population. We will first discuss the prevalence of SV victimization and perpetration in MAR in Europe. The findings regarding both victimization and perpetration will be presented together when they stem from the same studies.
 - 3.1.1 European prevalence of SV in MAR

As we will discuss later, estimating the prevalence of SV in MAR goes hand in hand with several challenges. The combination of these challenges has led to the identification of only five studies on SV in MAR in Europe matching our predetermined inclusion criteria and may be the primary reason for the scarcity of data on prevalence, consequences and mediating factors of SV in this population. A tendency to recycle the same studies in different literature reviews is therefore not unusual.

One such frequently cited paper concerns a community-based participatory study by Keygnaert et al. from 2012 [21] on sexual and gender-based violence (SGBV) in refugees, applicants and undocumented migrants in Belgium and the Netherlands. This study shows that approximately 57% of the participants indicated to be confronted with SV experiences, which comprised rape and sexual exploitation. Compared to the general population, the nature of the experienced SV cases showed to different with more reported incidences of multiple and gang rape [21]. A fifth of all respondents in this study stated to be sexually victimised themselves. A total of 332 acts of SGVB were described in 223 interviews, including 188 cases of SV of which 47 were personal experiences and 141 were experienced by a close peer of the respondent [21]. These results indicate an increased risk for MAR becoming confronted with SV. In line with findings from studies in the general population [4, 23], assailants are mostly known to their victims [21]. The assailant was in most cases an intimate partner (31%) and to a lesser degree a professional (23%), a family member (16%), an acquaintance (15%) or a stranger (12%) [21]. In a third of the incidences, the assailant was a European citizen [21].

When looking further into the European situation, another much-cited study by Keygnaert et al. [24] from 2014 in eight European countries (Belgium, Greece, Hungary, Ireland, Malta, The Netherlands, Portugal and Spain) examined the prevalence of SV in refugees, applicants for international protection and undocumented migrants in Europe. This community-based participatory study showed that in the European asylum reception sector both sexes as well as both residents as professionals are at risk of being exposed to different forms of violence, including SV, with 58,3% of the 562 respondents reporting to have been directly (23,3%) or indirectly (76,6%) confronted with SV [24]. This study also showed that victimization and perpetration of violence seems to be more gender-balanced in comparison with the general population. Both sexes indicated a comparable tendency to all types of violence perpetration and victimization. Yet, males were more likely to be involved in SV perpetration and emotional victimization whereas women tend to be more likely to become the victim of SV and perpetrate emotional violence [24]. At a more detailed level, we can see that 69% of the reported cases concerned the victimization of women compared to 29% concerning men being victimized since their arrival in Europe. The opposite pattern can be found when asking about who the assailants were. In 74% of the cases, the assailant turned out to be a man, in 21% the gender was not specified and only in 8% of the cases in involved a woman [24]. However, it should be noted here that the findings may be an underestimation since many of the respondents in the study indicated that they did not want to disclose or were hesitant to disclose personal SV experiences as long as they remained and/or worked in reception centres. Fear for reprisals by community members and feared impact on their asylum case or stay in the facility may have influenced the number of reported cases [24]. Although these studies give us an idea of the magnitude of the problem in this population, their objective was not to present representative prevalence numbers.

In the same period, the European Union Agency for Fundamental Rights (FRA) [9] published a report on an EU-wide survey about violence against women (VAW) which included a section on the prevalence of violence by migrant background. They concluded that women who were not citizen of their current country of residence were more likely to become victim of physical and/or SV by both partners and non-partners after the age of 15. However, they did not find notable differences from the general population in physical, sexual or psychological violence before the age of 15 and sexual

harassment and stalking after the age of 15 [9]. Unfortunately, these numbers cannot be broken down according to legal status, do not consider SV against men and are not comparable with the figures by Keygnaert et al. in 2012 & 2014 [21, 24].

In 2015, Doctors of the World (MdM) [25] disseminated a report on the access to healthcare in 2014 for vulnerable people, such as MAR, in 11 countries (Belgium, France, Germany, Greece, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, Turkey and Canada).

The data were collected by means of social and medical questionnaires administered to patients who attended a MdM consultation in one of the 11 countries [25]. Unfortunately, questions on SV were not raised in every country and strongly depended on the healthcare providers' willingness to address the issue. Even though the numbers could not be generalized, the results indicate that applicants for international protection were disproportionately highly represented among victims of violence [25] and thus may support the hypothesis that MAR are more vulnerable for SV than the general population. Among the patients who were questioned about their experiences with SV, 27,6% reported sexual assault. It was reported by 37,6% of women and 7,3% of men. Rape was mentioned by 14,9% of those patients and by 24,1% of the women and 5,4% of the men. Interestingly, male patients reported a quarter of the total numbers of sexual assault [25]. The figures cannot be considered prevalence rates since the method for data collection lacked systematics and representativeness. However, they provide an impression of the current situation.

Another important finding in this study, which continues in the line of the results found by Keygnaert et al. [21, 24, 26], relates to the experiences of SV throughout the trajectory of MAR from country of origin to country of destination. MAR do not only experience SV before migrating, but also during and after their arrival in Europe [25, 26]. In the studied population by MdM, 21,1% of the reported rapes and 17,7% of the sexual assaults took place after the victim's arrival in the host country. This is an important finding since the bulk of studies on SV in MAR only consider violence cases in the country of origin, ignoring the experiences on the road or after arrival. Keygnaert et al. [26] found in another study published in 2014 on SV among sub-Saharan migrants in Morocco that 45% of them experienced SV in a direct or indirect manner during their migration or in Morocco itself. These are important findings to consider when asking about SV in this population. Identifying aspects related to SV before leaving the country of origin, during transit and after arrival in the host country is necessary in order to provide appropriate and adequate policy recommendations and prevention strategies.

In 2009 the Refugee Council's Vulnerable Women's Project (VWP) [22] already published some numbers in line with the trends reported here. In a 21-month period (2006-2008), the project supported 153 refugee and asylum-seeking women in the UK. Of those, 76% indicated to have been raped, either in their home country or in the UK, to have been sexually abused (22%) or confronted with threatening of being raped or sexually abused while in detention in their country of origin (9%). Men were not included in this study [22].

We will shortly discuss some non-European studies on CRSV to illustrate these specific SV experiences that may have taken place before the migration process started. During the Rwandan genocide for example, up to half a million women were raped. In parts of Liberia more than 90% of women and girls above the age of three became the victim of CRSV and in parts of Eastern Congo, it is estimated that about 75% of the women were confronted with SV [22]. CRSV presents itself in specific forms, such as gang rape, depending on the war in which it takes place and the underlying function of the practice [27-30].

Although clear and robust prevalence rates of SV in MAR in Europe – including Belgium - are lacking, the evidence we have right now supports the hypothesis that MAR are vulnerable to become victim of SV. In addition, it is in line with the wide recognition that in times of conflict everyone is more exposed to violence and more particularity to SGBV [31]. The numbers reported on the situation in Europe also follow the same trend as a systematic review and meta-analysis from 2014 on SV among female refugees in complex humanitarian emergencies. Vu et al. [32] estimate the prevalence of SV in this population as approximately one in five women. Given the multiple barriers associated

with disclosing the experiences, the researchers stress that these numbers are most likely an underestimation.

3.2 Challenges in conducting, comparing and interpreting research in migrants, applicants for international
 protection and refugees

The challenges in conducting research on MAR were approached and analysed in this study from a socio-ecological perspective [16, 17] in which four interlinked levels play a key role. We started by looking at the issues identified on a societal and public policy level and continue with a narrower organisational and community level, followed by challenges at interpersonal level. We will finish this analysis with a discussion of barriers in conducting research at individual level.

3.2.1 Research challenges at the societal & public policy level

The societal level in the social ecological model looks at the broad societal factors that create a climate in which conducting research in a specific and vulnerable population as MAR becomes a challenge. First of all, regulations regarding legal statuses can significantly influence research opportunities. Ethical consideration play an important role here. Is it ethical to go into research questions which may ultimately lead to policies that may negatively impact the living situation of the studied community? Düvell et al. [33] give the example of documenting *how* undocumented migrants enter a country compared to studying the *why* question with regard to this behaviour. Researcher's findings may in the end be used disadvantageously by policy makers for the communities that participated [33]. A thorough reflection on the justification of why one wants to conduct a certain study and how the findings may be used afterwards should always be part of the preparatory phase.

Secondly, the extent to which people with different legal statuses are integrated into the larger administrative and demographic organisation of a society can have a strong impact too. A common approach in the European Union to register migrants is missing [34, 35]. A related obstacle concerns the difficulty of including MAR in representative studies. MAR are often omitted from large national studies because of language problems [23] and a lack of complete demographic information [34, 35]. Undocumented migrants also remain excluded from these studies since they are not represented in national registries [34, 35].

3.2.2 Research challenges at the organisational and community level

Challenges related to the nature of the research population also play a significant role in the difficulty of conducting research on MAR. Firstly, when the study population is characterised by being on the move, it is hard to investigate effects over longer periods of time. This is specifically relevant in the light of the impact of SV on the life of victims, assailants and their family and peers. Longitudinal designs are very hard to establish.

Another essential problem in conducting representative studies on all kinds of migrant populations, refers to the difficulties of getting access to a certain community. To start with, MAR are not equally distributed over Europe, nor within each country. They often live in big cities or near to a certain reception centre and even within these broader areas, they tend to live in specific neighbourhoods. This means that achieving nationwide randomized samples is very costly and inefficient [34, 35]. Furthermore, due to their legal status or rather the lack thereof, subpopulations of MAR often remain hidden [34, 35]. The combination of these factors make MAR a population that is heard to reach.

3.2.3 Research challenges at the interpersonal level

Many researchers are intrinsically motivated to work with this population because they want to contribute to improving their situations [36]. At the same time, research can only have a substantial impact for a group of people if results are published. Both ethical considerations and logistic challenges are central to finding the balance between applying high academic standards to the research design and making a difference for the participants. It is not always possible for researchers

to reveal the details of how they conducted the study (e.g. identified and selected subjects, handling of local security issues, context of the interviews, access to illegal immigrants, illegal activities performed by MAR, etc.), because the privacy of the researched individuals and the fact that their safety might be at stake. The political and legal issues related to the situation of applicants for international protection and refugees, means that they have fewer rights and are at risk when participating in research [33, 36]. Because of the protection of the safety of the participants for example, some elements of the research approach may not always be revealed. The manner of gaining access to undocumented migrants is one such an example. Participating in research on illegal behaviour may put both respondents and researchers at risk [33]. Withholding concrete and detailed descriptions of the research process and the gate keepers involved as a way of protecting individual participants and the community as a whole [33] may lead to a lack of reproducibility of the study later on and threaten the accountability of the results.

Researchers and their respondents often do not speak the same language and have different cultural backgrounds [36], meaning that translators or cultural mediators have to be involved in order to gather data. However, including a third party into qualitative research brings along new challenges such as erroneous translations, difficulties in establishing a relation of trust between the interviewer and the interviewee and the risk of interviewees refraining from disclosure out of fear of the effects on the community they belong too.

These challenges could be reduced through the use of a community based participatory research approach [6, 37]. This approach creates bridges between scientist and communities and establishes mutual trust by sharing knowledge and valuable experiences [6]. By participating within the community, researchers gain a deeper understanding of the unique circumstances a given community lives in. It facilitates open dialogue on sensitive issues and helps to define mutual agreements about the collaborative research process [6].

3.2.4 Research challenges at the individual level

On an individual level, two perspectives can be taken into account, namely that of the investigator and that of the person being investigated. Given the experience of this population with violent conflict, displacement and human rights violations, most researchers struggle with approaching their study population purely as objects of research without intervening while trying to make a difference and reduce suffering [33, 36]. From the researchers' point of view, remaining neutral can be quite the challenge.

From the point of view of the research participant, factors related to disclosing sensitive information about oneself can be considered as a perceived or real threat to personal safety (cf. supra).

3.3 Challenges in conducting research on sexual violence

In addition, research on SV itself can equally be a challenging task. Again several reasons for the lack of studies on this topic can be classified according to the socio-ecological framework.

3.3.1 Research challenges at the societal & public policy level

At a broader societal level, it appears that defining SV remains a significant challenge. What falls under SV is not always clear. Publications on the theme use different wordings to describe the same concepts and phenomena and contrariwise describe different types of SV with the same terminology. Further, the societal construction and awareness of SV often seems to be limited to female victims of rape perpetrated by men [6, 38, 39]. The victimization of males and transgender people is generally neglected [38, 39]. Stereotypical thinking about victims and sexual violence is strongly reinforced in ruling rape myths [40]. As we will discuss below, this impacts the funding of studies in specific populations and the research questions that are focused on.

3.3.1.1 A definition of sexual violence

Defining SV in a consistent manner is an important issue in researching and reporting on SV to avoid confusion and enhance comparability of findings [41]. In many papers for example, data on both sexual & physical violence are collected and/or analysed as one single item. When presented as a single item, the nature of the violence and the underlying dynamics remain unclear. Both physical and sexual violence encompass a multitude of types of violent acts and may emerge in diverse contexts and result in different consequences. Irrespective of those differences, physical and SV also show some overlap, are often linked to each other and may be hard to distinguish from one another in certain situations [6, 42]. Specifically, in the light of intimate partner violence (IPV), the distinction between the two may be unclear. SV encompasses all sexual acts against someone's will. It may be difficult to judge whether a sexual act in an intimate relationships is against a partners will. For example, when a partner has sex with his or her partner against their will to avoid later physical violence, does this accounts for SV or not? A clear distinction between the two is often not described and definitions are lacking.

The lack of a clear and encompassing definition of SV may result in policies and research funding that focuses solely on those forms of SV (such as completed rape of women) that are recognisable for the general public rather than correspond to how the phenomenon is really perceived and experienced by those people affected by it [6].

3.3.1.2 Violence against women & gender-based violence as an umbrella term

The same problem arises in the frame of VAW or GBV. SV is often discussed under those broader umbrella's which are often used interchangeably [22]. GBV is generally used to describe and capture all forms of violence that occur as a result of the normative role expectations associated with each gender, along with the unequal power relationships between the two genders, within the context of a specific society [43].

VAW could be considered as a subcategory of GBV in which violence is directed to girls and women and goes beyond what we consider as SV alone. It refers to many forms of violence, including IPV and rape/sexual assault and other forms of sexual violence perpetrated by someone other than a partner (non-partner sexual violence), as well as female genital mutilation (FGM), honour killings and the trafficking of women [4]. Notice that while women, girls, men and boys can all become victims of GBV [21, 26, 44], the main focus within this research area is on women and girls alone. To illustrate, an estimated 35% of all women worldwide are confronted at least once during their life with physical and/or sexual violence, IPV or SV by a non-partner [4]. When it comes to lifetime prevalence in men however, these numbers are not available.

From a gender perspective, as a result of a ruling patriarchy, power relations and hierarchical constructions of masculinity and femininity, women appear to be more vulnerable to structural gender inequality [23, 45]. Therefore, the primary focus within GBV lies on VAW [23], which creates a gap in the knowledge about GBV against boys and men [1, 44] and leads to a lack of possibilities in the comparison of female and male experiences when it comes to violence.

3.3.1.3 Defining human trafficking & sexual exploitation

Other umbrella terms related to SV and often used in context of MAR, are human trafficking, sexual exploitation and SV as a weapon of war or conflict-related SV (CRSV). These types of violence could play a role both in the decision to leave the home country or in the specific vulnerabilities of MAR while in transit or after arrival in the host country in Europe.

Trafficking in persons or human trafficking are often used as synonyms. Trafficking is characterized by the exploitation of vulnerable people in any kind of way. It is defined by the United Nations Office on Drugs and Crime (UNODC) as "recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation" [46]. One way of

exploitation is *sexual exploitation*, a form of SV which again covers a range of different forms of sexual violence, such as forced prostitution, sexual slavery, transactional sex, solicitation of transactional sex and having an exploitative relationship [47, 48]. The UN describes it in its glossary as "any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another" [48].

Estimates of trafficking for sexual exploitation are difficult to ascertain for a number of reasons. One of the complexities is the fact that the boundaries of trafficking and exploitation are often hard to define [49, 50]. Again, consensus on a clear definition of the practices is lacking. Ascertaining prevalence rates can thus be a challenging task. Nevertheless, there are enough indications of the magnitude of this problem to draw the conclusion that it is a not to be neglected issue, especially among MAR. The Refugee Council reports for example that between 4000 and 10000 migrant women and girls are sexually exploited in the UK [22]. A survey from 2012 by the International Labour Organization (ILO) showed that an estimated 22% of people in forced labour were sexually exploited. The organization also estimated that two-third of all the revenues from forced labour globally were the result of a form of forced sex work, amounting to around US\$99 billion or €85 billion a year [51].

As we will discuss later, migrants are specifically at risk of ending up in forced labour and experiencing SV in this context. According to the ILO, 44% of the victims had migrated within or across countries prior to being trafficked [51]. The ILO also indicates that the vast majority of victims of sexual exploitation are women and girls [49-51]. Importantly, we should not forget that the focus on females as being the only victims might lead to a biased image. Based on different literature reviews, multiple authors concluded that the existence of male sex workers was not acknowledged in the identified sources [52, 53].

In those cases where male sex workers were mentioned, they seemed to be considered less as less severely victimized. In contrast to female sex workers, they were assigned much more agency. Further, in studies on male victimization the focus was more on the danger of HIV infection rather than on the violence component [52], emphasizing the public health threat they form rather than the need for care [6] of male victims. Providing health care for MAR appears to be motivated primarily by removing a threat to public health [54, 55]. In this regard, focusing on infectious diseases is often more accepted than for example investing in mental health care, which is often considered as only benefitting the individual involved.

Keygnaert and Guieu [54] argue that the binary approach in SV research seeing women as victims and men as perpetrators ignores the complexity and multiplicity of the experience of violence, women's agency, male and LGBT victimization and role of reigning social norms leading to acceptance of violence [54]. Interestingly, in studies on male sex workers, sexual orientation seemed to be an important aspect, whereas female victims of sexual exploitation were automatically considered to be heterosexual [52]. SV against men seems to be recognized only when it concerns the rape of male prisoners or sexual torture of homosexual men [56, 57].

3.3.1.4 Conflict-related sexual violence (CRSV)

SV may also appear as a component of war and conflict. Situations during or post conflict are contexts with a high prevalence of SV [1]. CRSV refers to a potential weapon of war, ethnic cleansing or genocide and is widely acknowledged as a serious problem of international security [28]. This type of SV may be different from other types in that it is used as a strategical means to attain a goal, namely as a way of expressing power and dominance over a group considered as inferior [27]. SV probably occurs in all conflicts, but the prevalence and severity differs widely [28, 29, 58, 59]. The term CRSV covers all acts of SV that can be considered as strategical mechanisms deployed to attain military or political goals [60]. However, wartime rape is not necessarily always an intentional war strategy, but is often a tolerated weapon rather than an ordered way of attacking the enemy [27]. It is used as a way of torturing people, to exercise control over a specific group of people (e.g. ethnic minorities) or as a way to punish or offend individuals and the group to which they belong [22, 30].

It is important to consider all actors in conflict situations as possible victims and assailants. Making the distinction between the two roles in conflict areas can be very difficult [30]. Militias,

rebels, state officers and civilians are at risk of becoming either victim or assailant or both in the context of war, with armed state actors being identified as more frequently perpetrating SV than rebel groups [27]. In the literature concerning CRSV, we can again identify a gender bias given that researchers generally do not ask about the sex of the assailants, but assume they are male [27]. Where testimonies about CRSV against men do exist, they are often minimalised, not identified as SV or ignored. Although the literature is scarce, forced fellatio and masturbation, genital mutilation, forced rape by civilian men and forced insertion of objects in the anus of prisoners have been described during conflict [44, 56, 61]. Given this observation, it becomes clear that better knowledge about SV directed to boys and men is needed.

In combination with the diversity of SV in conflict areas, making statements about the general prevalence of CRSV is again not possible to date. In addition, apart from problems with defining SV from an relational and societal perspective, the terms "rape", "sexual assault", "sexual abuse" and "sexual violence", which are important from a factual and an individual point of view, are often considered to be synonymous and are in many papers used interchangeably [1]. This results in blurred prevalence numbers. Due to the lack of clear definitions used in studies, comparable prevalence data on SV is difficult to collect.

3.3.2 Research challenges at the organisational, community and interpersonal level

The organisation and structure within the community and institutions create a specific barrier in gaining access to populations. The refusal by community gate keepers or those in charge of institutions hinder the accessibility to individuals that may have information which can be of interest to researchers [6, 34, 35]. This leads again to the creation of bias and a lack of ungeneralizable data.

Linked to gaining access to a certain community to talk about SV, are interpersonal barriers related to the sensitivity of the researched topic. Disclosure of SV is one of the most important interpersonal challenge identified with regard to investigating SV. Respondents should be actively motivated to discuss their experiences with SV for researchers to receive the necessary details to be able to come to research conclusions that correspond with the lived reality by those involved. Therefore certain criteria should be met. Respondents will be more likely to talk about their experiences if they perceive the interviewer as trustworthy, as someone who understands the interviewee, as someone who responds in an accepting and not stigmatizing manner and if the respondent expects disclosure to lead to future benefits [62-64]. These benefits could be personal, but could also be related, for example, to the prevention of future victimization of others. Drawing the bigger picture of a study could in that light be very useful. Informing participants about what will happen ultimately with the findings of the study may be one way to increase the motivation for participation. Another strategy may be to involve them in the dissemination of the results within the community and to policy makers afterwards [2]. The use of a participatory research design could thus be an interesting approach to incentivise to engage in SV research.

3.3.3 Research challenges at the individual level

The primary reason for the difficulty of establishing the magnitude of the problem lies in the fact that those involved commonly hide the experience and health care workers do not recognize it. This may be among others out of fear of being stigmatized or of further violence after disclosure [22, 23, 56, 65]. One cannot count what remains hidden. 4. Discussion

Authors should discuss the results and how they can be interpreted in perspective of previous studies and of the working hypotheses. The findings and their implications should be discussed in the broadest context possible. Future research directions may also be highlighted.

4. Discussion

Based on the findings of this CIS, some recommendations for future research can be formulated. Firstly, there is a pressing need for high-quality representative prevalence studies on SV in MAR in Europe. Secondly, the identified challenges in conducting research on MAR lead to the conclusion

that a clean and ethical design for conducting research within this particular population may be hard to reach and that creative approaches and mixed methods may be necessary. Designing a study with this population would require that attention is paid to the specificities of MAR and their situation. This means that we, as researchers, should look for ways to reach MAR who could fall out of samples because of their legal status, cultural and language barriers. In addition, we need to guarantee the safety of the respondents. This can be done through a thorough preparation with an identification of the safety threats on all levels of socio-ecological model and providing an answer to them in an ethical and concrete way before the start of the field study. Researchers experienced that when the respondents were not dependent for care or reception on the facilities in which they were interviewed, they were more willing to talk about the experiences [21, 24]. Having an eye for the depended situation in which MAR may find themselves is one example of how we can estimate the safety threats for participants in SV research.

By working with interviewers who speak the same language and have the same cultural background as the respondents, misinterpretation of the data due to linguistic errors could be avoided. However, researcher should be critical for the introduction of cultural biases by those interviewers and discuss the interpretations with them. Further, this avoids the problem of having to work with interpreters and thus having a third party who might hamper the establishment of the relation of trust between the interviewer and the interviewee. Training the interviewers sufficiently in asking questions about sensitive issues and dealing with this information becomes key in this approach. Emphasizing the confidentiality of the shared information is crucial in every encounter in order to reassure the interviewee that the disclosed information will not be passed on to other persons of the community. In order to maintain participants' motivation, limiting the data collection to only one interview or questionnaire per respondent may help to avoid loss of follow-up.

Aside from elements influencing researching MAR population, challenges regarding research the topic of SV research should be addressed. First of all SV needs to be defined clearly. The definition should be inclusive, that is applicable to men, women and transgender people of all ages, regardless of their legal status, sexual orientation or gender identity. In order to do this, the acts falling under SV should be described as concrete and observable behaviours [41]. When inquiring on SV, attention should be given to not only the violent acts themselves, but the gender of both victim and assailant should be registered as well as the context in which the violence took place and the relation between the victim and assailant [66]. Given the broad range of types of SV possible in MAR, both open and closed questions regarding SV are necessary to cover the entire range of possibilities and to avoid interpretation bias [67].

When doing research on sensitive issues as experiences of SV, it is important to take into consideration that the study participants may experience unintended negative consequences as a result of their participation. Consequently, it may be useful to provide some follow-up if possible to ensure that they do not have come to harm as a result of the study [68-70].

Developing a clean research design for research in MAR is quite the challenge. A balancing exercise between ethical considerations and academic standards will be key, but worth it.

5. Conclusions

Sexual violence in MAR in Belgium and Europe is probably more frequent than in the general population, however representative studies confirming this hypothesis are lacking. Future research should start with a clear definition of the concerned population and acts of SV in order to generate high-quality and comparable data. Given the necessity of taking the specific experiences related to different migratory stages and motivations into consideration, qualitative research using interviewers trained in cultural and linguistic competence, should be applied to fully grasp the complex interplay of SV in MAR.

Author Contributions: Lotte De Schrijver performed the CIS and wrote the paper. Ines Keygnaert is the initiator and supervisor of the study and actively contributed to the data collection, CIS analysis and writing of the paper. Tom Vander Beken is co-supervisor of the study and contributed to the reflection process of the CIS and writing

- of the paper. Barbara Krahé contributed to this paper with provision of relevant literature and feedback on
- structure and writing of the paper.
- 555 Funding: The research that lead to these results was subsidized by the Belgian Federal Science Policy via contract
- 556 BR/175/A5/UN-MENAMAIS.
- 557 **Conflicts of Interest:** The authors declare no conflict of interest.
- 558 References
- 559 1. World Health Organization: Guidelines for medico-legal care for victims of sexual violence. Geneva:
- 560 WHO Press; 2003.
- 561 2. Keygnaert I: Seksueel geweld tegen vluchtelingen, asielzoekers en mensen zonder wettig verblijf in België
- en Nederland. In: *Vrouwen onder druk: Schendingen van de seksuele gezondheid bij kwetsbare vrouwen.* edn.: Lannoo;
- 563 2010: 69-88
- 3. World Health Organization: World report on violence and health. Geneva: WHO Press; 2002.
- World Health Organization: Global and regional estimates of violence against women: prevalence and
- health effects of intimate partner violence and nonpartner sexual violence. Geneva: WHO Press; 2013.
- 567 5. Sexual and reproductive health. Sexual violence
- 568 [http://www.who.int/reproductivehealth/topics/violence/sexual violence/en/]
- 6. Keygnaert I: Sexual violence and sexual health in refugees, asylum seekers and undocumented migrants
- 570 in Europe and the European neighbourhood: determinants and desirable prevention. Ghent University; 2014.
- 571 7. Depraetere J, De Schrijver L, Nobels A, Inescu A, Keygnaert I: The myriad of sexual violence definitions.
- 572 In: UN-MENAMAIS literature review: Understanding the Mechanisms, Nature, Magnitude and Impact of Sexual
- Violence in Belgium- A critical interpretative Synthesis. edn. Edited by Keygnaert I; 2018.
- 574 8. Freedman J: Sexual and gender-based violence against refugee women: a hidden aspect of the refugee"
- 575 crisis". *Reproductive health matters* 2016, 24(47):18-26.
- 576 9. FRA European Union Agency for Fundamental Rights: Violence against women: an EU-wide survey.
- 577 Luxembourg: Publications Office of the European Union; 2014.
- 578 10. Myria: De asielcrisis van 2015 : cijfers en feiten. In. Brussels: Myria; 2015.
- 579 11. Figures at a Glance [http://www.unhcr.org/figures-at-a-glance.html]
- 580 12. Bradby H, Humphris R, Newall D, Phillimore J: Public health aspects of migrant health: a review of the
- evidence on health status for refugees and asylum seekers in the European Region. In: *Health Evidence Network*
- 582 Synthesis Report 44. Copenhagen: WHO Regional Office for Europe; 2015.
- 583 13. Myria: 2017. Migratie in cijfers en in rechten. In. Brussels: Myria; 2017.
- 14. Higgins JP, Green S: Cochrane handbook for systematic reviews of interventions, vol. 4: John Wiley &
- 585 Sons; 2011.
- 586 15. Dixon-Woods M, Cavers D, Agarwal S, Annandale E, Arthur A, Harvey J, Hsu R, Katbamna S, Olsen R,
- 587 Smith L *et al*: Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Med Res Methodol* 2006, 6:35.
- 589 16. Bronfenbrenner U: The ecology of human development: Experiments by nature and design. *American*
- 590 Psychologist 1979, 32:513-531.
- 591 17. Berk LE: Child Development, 7th edn. Boston: Pearson Education,; 2006.
- 592 18. Alberani V, De Castro Pietrangeli P, Mazza AM: The use of grey literature in health sciences: a
- 593 preliminary survey. Bulletin of the Medical Library Association 1990, 78(4):358-363.
- 594 19. McAuley L, Pham B, Tugwell P, Moher D: Does the inclusion of grey literature influence estimates of
- intervention effectiveness reported in meta-analyses? *The Lancet* 2000, 356(9237):1228-1231.
- 596 20. Keygnaert I, Anastasiou A, Camilleri K, Degomme O, Devile W, Dias S, Field C, Kovats A, Vettenburg N,
- 597 Temmerman M: Senperforto: determinants for effective prevention and response actions of SGBV perpetration
- and victimization in the European asylum reception system. In: 7th European congress on Tropical Medicine and
- 599 *International Health*: 2011; 2011: 96-96.
- 600 21. Keygnaert I, Vettenburg N, Temmerman M: Hidden violence is silent rape: sexual and gender-based
- violence in refugees, asylum seekers and undocumented migrants in Belgium and the Netherlands. *Cult Health Sex* 2012, 14(5):505-520.
- 603 22. Refugee Council: The vulnerable women's project: Refugee and asylum seeking women affected by rape
- or sexual violence. A literature review. London: Refugee Council Retrieved August 2009, 2:2012.

- Watts C, Zimmerman C: Violence against women: global scope and magnitude. *The lancet* 2002, 359(9313):1232-1237.
- 607 24. Keygnaert I, Dias SF, Degomme O, Deville W, Kennedy P, Kovats A, De Meyer S, Vettenburg N, Roelens
- 608 K, Temmerman M: Sexual and gender-based violence in the European asylum and reception sector: a
- 609 perpetuum mobile? *Eur J Public Health* 2015, 25(1):90-96.
- 610 25. Chauvin P SN, Vanbiervliet F, Vicart M and Vuillermoz C: Access to healthcare for people facing multiple
- vulnerabilities in health in 26 cities across 11 countries: Report on the social and medical data gathered in 2014
- in nine European countries, Turkey and Canada. Paris: Doctors of the World Médecins du monde
- 613 international network; 2015.
- 614 26. Keygnaert I, Dialmy A, Manco A, Keygnaert J, Vettenburg N, Roelens K, Temmerman M: Sexual violence
- and sub-Saharan migrants in Morocco: a community-based participatory assessment using respondent driven
- 616 sampling. Global Health 2014, 10:32.
- 617 27. Cohen DK, Green AH, Wood EJ: Wartime sexual violence. USIP Special Report 2013.
- 618 28. Cohen DK, Nordås R: Sexual violence in armed conflict: Introducing the SVAC dataset, 1989–2009. *Journal of Peace Research* 2014, 51(3):418-428.
- 620 29. Wood EJ: Sexual violence during war: Variation and accountability. *Collective Crimes and International*
- 621 Criminal Justice: an Interdisciplinary Approach, Intersentia, Antwerp 2010.
- 622 30. Deleu N: Naar een inclusief referentiecentrum seksueel geweld in België: op welke manier kan er
- rekening gehouden worden met noden van mensen uit door oorlof getroffen gebieden? Ghent: Ghent
- 624 University; 2016.
- 625 31. More than numbers. Regional overview: Responding to gender-based violence in the Syria crisis.
- 626 [http://www.unfpa.org/sites/default/files/pub-pdf/unfpa_gbv_take10-may17-single41.pdf]
- 627 32. Vu A, Adam A, Wirtz A, Pham K, Rubenstein L, Glass N, Beyrer C, Singh S: The Prevalence of Sexual
- Violence among Female Refugees in Complex Humanitarian Emergencies: a Systematic Review and Metaanalysis. *PLoS Curr* 2014, 6.
- 630 33. Düvell F, Triandafyllidou A, Vollmer B: Ethical issues in irregular migration research in Europe.
- 631 *Population, Space and Place* 2010, 16(3):227-239.
- 632 34. Leye E, De Schrijver L, Van Baelen L, Andro A, Lesclingand M, Ortensi L, Farina P: Estimating FGM
- prevalence in Europe. Findings of a Pilot Study. Research Report In. Ghent: Ghent University ICRH; 2017.
- 634 35. Van Baelen L, De Schrijver L, Leye E: Towards a better estimation of prevalence of female genital
- mutilation in the European Union: situation analysis. In. Unpublished report; 2017.
- 636 36. Jacobsen K, Landau LB: The dual imperative in refugee research: some methodological and ethical
- 637 considerations in social science research on forced migration. Disasters 2003, 27(3):185-206.
- 638 37. Stacciarini J-MR, Shattell MM, Coady M, Wiens B: Community-based participatory research approach to
- address mental health in minority populations. *Community mental health journal* 2011, 47(5):489-497.
- 640 38. Krug EG, Mercy JA, Dahlberg LL, Zwi AB: The world report on violence and health. *The lancet* 2002, 360(9339):1083-1088.
- 642 39. Peterson ZD, Voller EK, Polusny MA, Murdoch M: Prevalence and consequences of adult sexual assault
- of men: Review of empirical findings and state of the literature. *Clinical Psychology Review* 2011, 31(1):1-24.
- 644 40. Peterson ZD, Muehlenhard CL: Was it rape? The function of women's rape myth acceptance and
- definitions of sex in labeling their own experiences. Sex Roles 2004, 51(3-4):129-144.
- 646 41. Cook SL, Gidycz CA, Koss MP, Murphy M: Emerging issues in the measurement of rape victimization.
- 647 Violence against women 2011, 17(2):201-218.
- 648 42. Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, Stevens MR: The national
- intimate partner and sexual violence survey: 2010 summary report. Atlanta, GA: National Center for Injury
- 650 Prevention and Control, Centers for Disease Control and Prevention 2011, 19:39-40.
- 651 43. Bloom SS: Violence against women and girls: a compendium of monitoring and evaluation indicators.
- 652 2008.
- 653 44. Carpenter RC: Recognizing gender-based violence against civilian men and boys in conflict situations.
- 654 Security dialogue 2006, 37(1):83-103.
- 45. World Health Organization/London School of Hygiene and Tropical Medicine: Preventing intimate
- partner and sexual violence against women: taking action and generating evidence. In. Geneva: World Health
- 657 Organization; 2010.

- 658 46. Human Trafficking [https://www.unodc.org/unodc/en/human-trafficking/what-is-human-
- 659 trafficking.html]
- 660 Miller E, Decker MR, Silverman JG, Raj A: Migration, sexual exploitation, and women's health: a case
- 661 report from a community health center. Violence Against Women 2007, 13(5):486-497.
- 662 Task Team on the SEA Glossary for the Special Coordinator on improving the United Nations response to
- 663 sexual exploitation and abuse: United Nations Glossary on Sexual Exploitation and Abuse. Thematic Glossary
- 664 of current terminology related to Sexual Exploitation and Abuse (SEA) in the context of the United Nations. In.
- 665 Edited by United Nations. New York; 2016.
- 666 Hume DL, Sidun NM: Human Trafficking of Women and Girls: Characteristics, Commonalities, and
- 667 Complexities. In.: Taylor & Francis; 2017.
- 668 50. Lopez DA, Minassians H: The Sexual Trafficking of Juveniles: A Theoretical Model. Victims & Offenders
- 669
- 670 51. International Labour Organization (ILO): Profits and poverty: The economics of forced labor. In. Geneva:
- 671 International Labour Organization; 2014.
- 672 Dennis JP: Women are victims, men make choices: The invisibility of men and boys in the global sex
- 673 trade. Gender Issues 2008, 25(1):11-25.
- 674 Oram S, Stöckl H, Busza J, Howard LM, Zimmerman C: Prevalence and risk of violence and the physical,
- 675 mental, and sexual health problems associated with human trafficking: systematic review. PLoS medicine 2012,
- 676 9(5):e1001224.
- 677 54. Keygnaert I, Guieu A: What the eye does not see: a critical interpretive synthesis of European Union
- 678 policies addressing sexual violence in vulnerable migrants. Reprod Health Matters 2015, 23(46):45-55.
- 679 Keygnaert I, Guieu A, Ooms G, Vettenburg N, Temmerman M, Roelens K: Sexual and reproductive
- 680 health of migrants: does the EU care? Health Policy 2014, 114(2-3):215-225.
- 681 Oosterhoff P, Zwanikken P, Ketting E: Sexual torture of men in Croatia and other conflict situations: an
- 682 open secret. Reproductive health matters 2004, 12(23):68-77.
- 683 57. Amnesty International: Crimes of hate, conspiracy of silence: torture and ill-treatment based on sexual
- 684 identity. In. London: Amnesty International; 2001.
- 685 Wood EJ: Variation in sexual violence during war. Politics & Society 2006, 34(3):307-342.
- 686 Wood EJ: Armed groups and sexual violence: When is wartime rape rare? Politics & Society 2009,
- 687 37(1):131-161.

688 60. Bastick M, Grimm K, Kunz R: Sexual violence in armed conflict. Geneva: Center for the Democratic Control of

- 689 Armed Forces 2007.
- 690 61. Carlson ES: The hidden prevalence of male sexual assault during war: Observations on blunt trauma to
- 691 the male genitals. British Journal of Criminology 2005, 46(1):16-25.
- 692 De Schrijver L: Selective disclosure bij coming out: Een exploratief onderzoek bij holebi's. Leuven: Leuven
- 693 : K.U.Leuven. Faculteit Psychologie en Pedagogische Wetenschappen; 2013.
- 694 63. Bottoms BL, Peter-Hagene LC, Epstein MA, Wiley TRA, Reynolds CE, Rudnicki AG: Abuse
- 695 Characteristics and Individual Differences Related to Disclosing Childhood Sexual, Physical, and Emotional
- 696 Abuse and Witnessed Domestic Violence. Journal of Interpersonal Violence 2016, 31(7):1308-1339.
- 697 64. Vangelisti A, Caughlin J, Timmerman L: Criteria for revealing family secrets. Communication Monographs
- 698 2001, 68(1):1-27.
- 699 65. Eapen R, Falcione F, Hersh M, Obser K, Shaar A: Initial Assessment Report: Protection risks for women
- 700 and girls in the European refugee and migrant crisis. In.: UNHCR, United Nations High Commissioner for 701
- Refugees; 2016.
- 702 66. Krahé B, Vanwesenbeeck I: Mapping an agenda for the study of youth sexual aggression in Europe:
- 703 Assessment, principles of good practice, and the multilevel analysis of risk factors. Journal of sexual aggression 704 2016, 22(2):161-176.
- 705 67. Krebs CP, Lindquist CH, Warner TD, Fisher BS, Martin SL, Childers JM: Comparing sexual assault
- 706 prevalence estimates obtained with direct and indirect questioning techniques. Violence Against Women 2011, 707 17(2):219-235.
- 708 68. Stark L, Ager A: A systematic review of prevalence studies of gender-based violence in complex
- 709 emergencies. Trauma, Violence, & Abuse 2011, 12(3):127-134.
- 710 Kuyper L, Wijsen C, de Wit J: Distress, need for help, and positive feelings derived from participation in
- 711 sex research: Findings of a population study in the Netherlands. The Journal of Sex Research 2014, 51(3):351-358.

Peer-reviewed version available at International Journal of Environmental Research and Public Health 2018; doi:10.3390/iierph15091979

- 712 70. Yeater E, Miller G, Rinehart J, Nason E: Trauma and sex surveys meet minimal risk standards:
- 713 Implications for institutional review boards. *Psychological Science* 2012, 23(7):780-787.