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Constructive Support to Victims of Sexual Violence to Prevent Post traumatic Stress

Disorder

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Degree Programme in global
Development and management
Master's Thesis
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Laurea University of Applied Sciences **Abstract**
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CONSTRUCTIVE SUPPORT TO VICTIMS OF SEXUAL VIOLENCE TO PREVENT POST TRAUMATIC STRESS DISORDER

Year 2020 Pages 51

Sexual violence is a world-wide distinct burden because it affects every nation despite age and sex. It leaves behind different physical and mental outcomes to the affected victims, therefore the need for tremendous support to recover. The goal of the European Union is to eradicate violence against women, and this has been done by signing the Istanbul convention. Finland was named among the European Union countries that have been reluctant to the sexual violence law.

This study's objective is to obtain evidence on support given to sexual violence victims and recommendations on how it can be improved. The research questions used in this study include: (i) What are the clinical and practical procedures to be followed while supporting sexual violence victims? (ii) How effective are the clinical and practical procedures used to support victims of sexual violence? And what are the existing evidence-based recommendations for effective support to sexual violence victims?

The method used in this study was integrative literature review. Five databases were searched EBSCO (CINAHL), PUBMED, PROQUEST CENTRAL, SAGE and SCIENCE DIRECT (ELSEVIER). Data search took place in November 2019 and 10 diverse studies were selected for this study. Quality appraisal for this study was performed using 3 different appraisal tools that were critical Appraisal Skill Programme (CASP), mixed-method appraisal tool (MMAT), and strengthening the reporting of observational studies in epidemiology (STROBE). Data collected from the studies was extracted, examined, and categorized by themes.

Ten diverse studies fulfilled the studies inclusion criteria. Five different themes in the findings from the studies, which included Consequences of sexual violence, current support for sexual violence victims, effectiveness of the clinical and practical procedures used to support victims of the sexual violence, barriers to constructive support, and recommendations of effective support to survivors. In a nutshell, all survivors of sexual violence needed were empathy, family support, and acceptance to go through the long road to recovery.

Keywords: Sexual violence, Support strategies, sexual violence survivors, Post-traumatic stress disorder

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1 Introduction

Sexual violence is widely known as the 'silent epidemic' because most of the cases go unreported. Countless victims have stayed silent by not reporting the offences in fear of being blamed, embarrassed, degraded, or mistreated (WHO, 2002). It is a harsh and forceful act that affects the victims, finance, social wellbeing, and health. As a global problem is not only observed in the geographical area sense, but also in terms of age and sex (Wells, 2017). This year (2020) in the United States, the Centre for Disease Control and Prevention(CDC) reports about one in three women and one in four men have suffered a complete or an attempted sexual assault in the form of physical contact at some point in their lives. An estimate of 3,700,000 women in the European union had encountered sexual victimization within a period of one year ahead to the 2014 survey (Fra, 2015).

The effect of sexual violence in children is significant because it affects everyone around the abused child. Wistfully, evidence conducted within several trials reveals that one in every three female and one in four male sexual assault victims have had their first experience between eleven to seventeen years old; and also one in four sexual assault victims experienced it before ten years of age (CDC, 2020). Children and adolescents are at increasingly high risk to sexual exploitation, sexual predators, and opportunists (Lalor & MCElvaney, 2010). There is basically little research done about childhood sexual abuse involving both children survivors and caregiver's perspectives. In addition, recent studies have highlighted the importance of engaging children in the research process to get their perspectives on their experiences and perceived intervention services (Lalor & MCElvaney, 2010).

Several studies recognized post-traumatic stress disorder (PTSD) as strongly linked to sexual abuse trauma since the incidence is commonly related to dissociative symptoms existing in childhood sexually abused victims (Kaplow, Dodge, Amaya-Jackson & Saxe, 2005). After traumatic events, there are noticeable changes in the survivors' perceptions and beliefs about themselves, the world, and the future, probably leading to negative emotional responses and maladaptive actions, thus contributing to the development and maintenance of PTSD (Lee, Scragg & Turner, 2011). In 2001, the incidence range of PTSD in children after sexual or physical abuse was stated to be 21% to 55% (Linning & Kearney, 2004).

Victims of sexual violence need a lot of support to heal from the devastating event. However, children who have experienced sexual abuse do not usually show up for intervention support (Lalor & McElvaney, 2010). Listening and non-judgemental strategies such as trauma narrative therapy have been rated effective and very important to survivors during the healing process (Devlin, Hill, Berry, Felder, and Wilson, 2019). In that case, sexual violence victims are apt to

reveal their experiences to informal helpers such as family and friends, therefore recent research has mostly focused on the diverse form of support (Banyard, Moynihan, Walsh, Cohn & Ward, 2010).

This purpose of the study is to explore the literature on the nature of support accessible to sexual violence victims with specific focus on childhood sexual violence; to explore how the support can be given to the victims of sexual violence, and to create guidelines and investigate the effectiveness of recommended support to sexual violence victims to prevent post-traumatic stress disorder.

2 Sexual Violence

Sexual violence is defined as any sort of sexual deed perpetuated to someone against their will (Wells 2017). Sexual violence includes rape and any other unwanted sexual contact or practise. Sexual violence is an extensive term which may include stalking, groping, sexual harassment, relationship abuse, incest, sexual assault, and rape. The 2015 European Union Agency for Fundamental Rights (FRA) survey interprets that sexual violence acts such as physical manners, verbal and sexual gestures occur in the working environment exteriors. It is important to note that anyone can become a victim of sexual violence and sexual violence affects people of all age and genders. Children, boys, girls, women, men, and adults can experience sexual violence and can happen anywhere (Terveyden & Hyvinvointi Laitos (THL) 2018). The world health organisation (2002) categorises sexual violence as a form of interpersonal violence and emphasises that, it can also be a form of collective violence.

A lot of evidence has proved that during times of conflict, sexual violence often becomes more common (Koegler et al, 2019). Refugees have a higher exposure to encountering sexual violence or even might have experienced it in their home countries or on their way to seeking refuge. In previous population studies, it was confirmed that immigrants particularly those who move as refugees, experience a lot of psychological and mental problems compared with the native population (Castaneda et al, 2018). According to research, intersectionality was identified as a major highlight of facing violence and it was also discovered that diverse groups were linked to violence and abuse, and the most affected groups included shelters or refuges (Stanley & Devaney, 2017). Although it should be put into consideration that sexual violence is not part of any religion or culture because it is observable in all cultures.

Another study done in 2017 about aged between 18 –74 years co-habiting with their male partners, showed the association between physical and psychological interpersonal violence and abuse against women, as well as male partners' traditional roles and level of general violence (Stanley & Devaney 2017). It is very often that the victim knows the perpetrator, but it is also possible to be a total stranger. For example, many women experience sexual violence in their

marriages such as being raped by their partners. It is also obvious that sexual violence is a form of violence that wounds the victim deeply that the affected might suffer long-term consequences. In a survey, it was discovered that almost 64% of the victims of sexual violence by a partner left them fearful well as those who experienced it from a non-partner left the victims in shock emotionally (FRA 2015). Sexual violence victims also usually experience mental health problems right after violence or these problems might activate years after the violence. Additionally, FRA points out the loss of self-esteem, anxiety, and vulnerability as the most common psychological long-term consequences of sexual violence.

There are also other forms of sexual violence associated with cultural traditions or the threat of it can endanger sexual health. For example, honour violence, female genital mutilation, the prohibition of birth control. It is clearly specified in the article 113(a) of the Beijing Declaration and Platform for action (1995) the different forms of violence which also included sexual violence in this category. Female genital mutilation (FGM) is a circumcision procedure done to female external genital organs. The WHO (2014) defines it as procedures made to partially or totally remove the external female genitalia or other non-medical procedures done to injure the female genital. It is highlighted that millions of girls and women received FGM in 30 African countries, Middle East, and Asia (WHO 2018).

An estimate of about 10,000 mutilated women live in Finland and 3,000 girls might be under the danger of being mutilated (THL 2018). THL (2018) also added that the majority of these mutilated women living in Finland originated from Somalia, Ethiopia, Kurdistan, and Eritrea. Girls are usually mutilated between the Age of four and ten but according to recent studies, even older girls have been mutilated. Annually, an estimate for more than three million girls between infancy and adolescence are at the risk of FGM (WHO, 2018). Mutilation causes serious mental and physical damage, pains, and problems in childbirth and additionally inability for sexual pleasure. It is reported that eight out of ten studies identified psychological consequences, such as affective disorders and PTSD after FGM (Mulongo, Martin & McAndrew 2014). The psychological problems are obvious through sense of security destruction. It is also important to note that, not all countries have access to information on sexual health and sexual rights. That is, not all acts of sexual violence might be considered crimes in various countries. For example, some forms of sexual violence in marriage are not crimes at the perpetrator's point of view.

The typology in Figure 1 provides a framework and a wide understanding about the four different types of violence and its nature. It verifies that sexual violence is indeed a form of violence. In addition, it captures the nature of violent performances, the significance of the setting, the perpetrator and victim's relationship; and under the form of collective violence, it displays the possible motives of this type of violence.

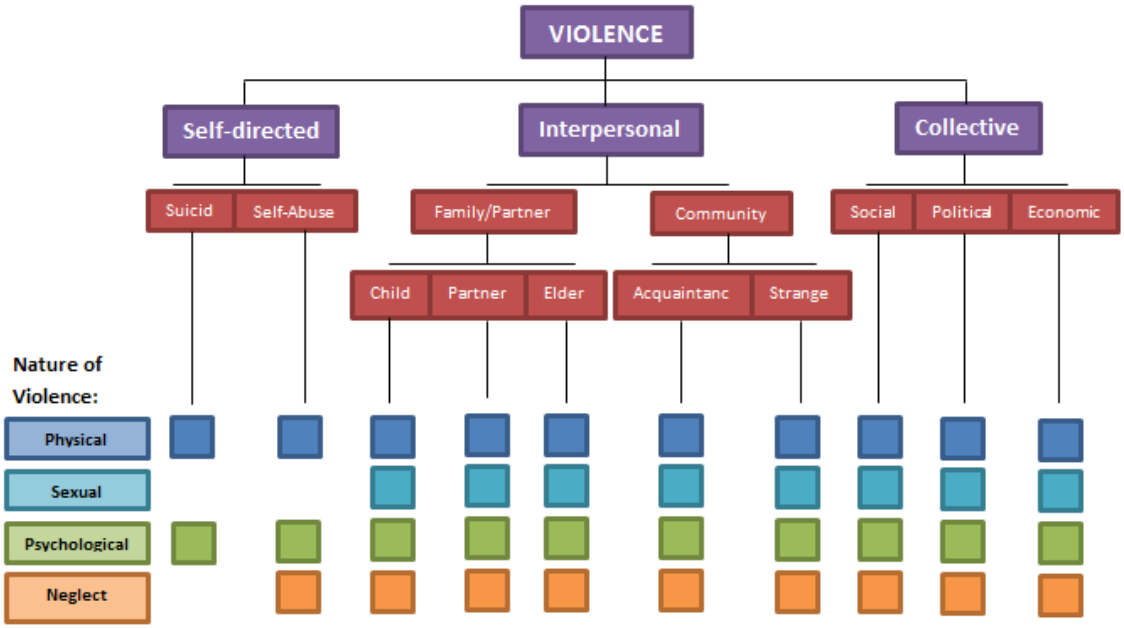

Figure 1: Typology of violence (Figure accessed from WHO page through open access policy, 2002).

2.1 Prevalence of Childhood Sexual Violence

In the European Union, the statistics show that in every three women, one has encountered some form of bodily and/or sexual violence while 15 years old and 22% of which the perpetrator is a partner (FRA, 2015). In the same report of the survey by FRA (2015) about different forms of sexual harassment in twenty eight EU countries also reported that, eighty three million to one hundred two million women had experienced sexual harassment before fifteen years of age; and in Finland 29% of the 4,464 women who had participated in the study, while aged fifteen years had faced sexual harassment, or threat from a non-partner. Youth are more likely to face sexual assault three times more than the general public. The youth are more vulnerable to sexual abuse because they do not have a lot of protective measures as older people do. Many predicators have resorted to using sexual media sites posing as young teen male to meet young girls. Peer pressure is also one of the main influences of sexual violence among the youth.

Table 1 shows the percentage of women in the 28 EU states who faced sexual harassment while aged fifteen years.

EU Member State	Current Partner	Previous Partner	Any partner (Current & / or Previous partner)	Non-partner	Any partner & / or non-partner
Austria	3	15	13	12	20
Belgium	8	29	24	25	36
Bulgaria	11	38	23	14	28
Cyprus	6	24	15	12	22
Czech Republic	6	23	21	21	32
Germany	7	24	22	24	35
Denmark	12	31	32	40	52
Estonia	7	23	20	22	33
Greece	10	17	19	10	25
Spain	4	18	13	16	22
Finland	11	31	30	33	47
France	11	31	26	33	44
Croatia	7	13	13	13	21
Hungary	7	23	21	14	28
Ireland	4	19	15	19	26
Italy	9	25	19	17	27
Lithuania	11	31	24	16	31
Luxembourg	7	26	22	25	38
Latvia	13	38	32	17	39
Malta	5	28	15	15	22
Netherlands	9	27	25	35	45
Poland	5	17	13	11	19
Portugal	8	28	19	10	24
Romania	14	30	24	14	30
Sweden	7	29	28	34	46
Slovenia	5	21	13	15	22
Slovakia	12	26	23	22	34
United Kingdom	5	34	29	30	44
EU-28	**8**	**26**	**22**	**22**	**33**

Table 1: The percentage of women who faced sexual harassment while aged 15years by EU Member State (constructed by the author-based FRA, 2015).

2.2 Sexual Violence in Finland

According to the European Union Agency for Fundamental rights (2014), 37 % of women in Finland have experienced a form of sexual violence in their lifetime. Additionally, in 2014, Finland was ranked as EU's second most violent country against women in a study made by the EU's fundamental rights agency (FRA, 2014). Statistics also show that the number of sexual violence in Finland has doubled since the year 2000. In 2015 report, the prevalence of sexual harassment rates in Finland range from 81% - 71% in the same league with countries like Sweden, Denmark, France, and the Netherlands (FRA, 2015). In 2018, the number of sexual offences in Finland increased significantly compared to the previous years. Statistics show that over-all 439,200 crimes were documented by the police, customs, and border guard in 2018, that is 800 cases more than 2017 (Statistics Finland, 2019). Figure 2 demonstrates the comparison with monthly rape offences reported of three different years.

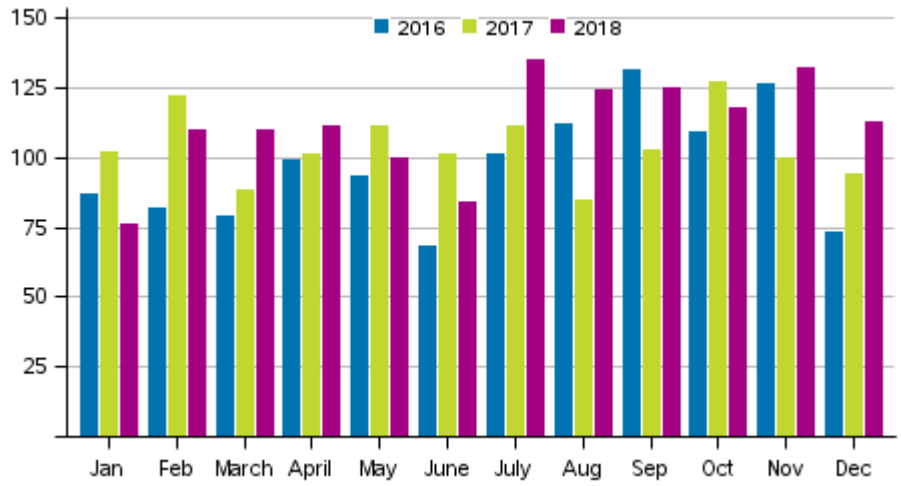

Figure 2: Rape offences by month 2016 to 2018 (Statistics.fi, 2019). Copyrights permission grated by the organisation in Finland.

In 2017, 7.3% rapes more than 2016 were recorded all over Finland (Statistics Finland, 2018). The statistics only record incidences that are reported to the police but there are many unreported ones. WHO (2002) also emphasises that, there are a few reported rape cases to the police; this is usually because victims are ashamed, fear being blamed or not believed. Table2 shows the rape crimes reported in different provinces of Finland.

Region	Rape offences
Uusimaa	25
Southwest Finland	23
Satakunta	23
Kanta-Hame	19
Pirkanmaa	21
Päijät-Häme	15
Kymenlaakso	33
South Karelia	16
South-Savo	13
North-Savo	23
North-Karelia	19
Central Finland	18
South Ostrobothnia	15
Ostrobothnia	20
Central Ostrobothnia	14
North Ostrobothnia	19
Kainuu	20
Lapland	23
Åland	30
Whole country	22

Table 2: statistics of rape offences per 100,000 population in Finland in the year 2017 (constructed by the author-based on statistics Finland permission granted by statistic.fi Finland).

The introduction of a pattern of strict guidelines, extremely entrenched gender imbalances, and a continuous awareness about interpersonal violence is a sign that women continue to experience violence and abuse extensively across Europe (Stanley & Devaney 2017). During the meeting Istanbul convention action against violence on women and domestic violence in 2011, Finland was named among the states that did not pay enough attention towards sexual violence victims (FRA 2014). 22 countries signed and ratified a convention, that committed to protect and support women who were victims of violence. Finland was among the counties that made a national voluntary pledge in 2012 at the high-level meeting of the general assembly on the rule of law, to ratify the council of Europe convention on protecting and opposing violence against women (UN Rule of Law 2018). The convention sets out minimal standards for protection, prevention, prosecution, and integrated policies thus involving government agencies, non-profit organisations, and local authorities. Even though the Istanbul Convention was warmly

welcomed in 2011 as an essential legal and policy commitment across the EU, it should be put into consideration that it is still a framework and has not yet been evenly implemented throughout the EU (Stanley & Devaney 2017). It is the responsibility of all the 22 states to remedy the situation of violence against women.

In April 2019, the Amnesty International board warned Finland about the dissatisfaction of sexual survivors gaining justice due to elevated levels of impunity for sexual violence in Finland and the fact that the state had failed to act in response to sex offenses. Additionally, recently in a report published in September 2019 by Amnesty International, Finland was again condemned by the international body for its outdated definition of rape finding it as a challenge to support the survivors of sexual violence. In solution to the addressed failure, the Finnish ministry of justice formed a team to work on the reformation of the criminal policy on sexual assaults and the expected delivery period for the results by May 2020 (Amnesty International, 2019).

2.3 Sexual Violence Victims or Survivors

A Sexual assault victim or survivor is someone who has undergone sexual abuse act or acts. Rape does not define sexual assault but a misconduct the weapon used is sex (CDC, 2020). The range of acts may include rape, incest, attempted rape, molestation, spousal rape, and unwanted toughing of one's private parts. Sexual violence has been witnessed in different gender, race, and age groups. The widely reported type of survivors include military, childhood, adult, and male sexual survivors. Although commonly reported offences are experienced by females, but sexual violence survivors can both be male or female (Devlin, Hill, Berry, Felder & Wilson, 2019). CDC (2020) also highlights that sexual assault probability at an early stage has increased statistics showing that most survivors of sexual violence have experienced as early as before turning ten years of age in their life. Due to the recent global instabilities, military sexual assault trauma (MST) has been on the rise. Military sexual assault has been defined as an act of sexual assault or sexual harassment during military service and has gained a lot of momentum in the United States (Northcut & Kienow, 2014).

2.4 Post-traumatic stress disorder after Sexual Violence

Many people experience some kind of trauma during a lifetime, but victims of sexual assault violence endure a lot after experiences of victimisation. As a result, they face to several health consequences which may include both short-term and long-term psychological difficulties such as suicidal thoughts, anxiety, and depression (Watts, Hossain & Zimmerman, 2013). This phenomenon is called post-traumatic stress disorder (PTSD). According to the 2020 American Psychological Association (APA), PSTD is defined as an anxiety problem which most people develop later in their lives after an extremely traumatic event. These traumas are sometimes escaped

with no long-term effects but the key challenge to people copying with PTSD is vulnerability to triggers which could be environmental. For instance, if a trauma experience were in a bush, any sight of a bush could trigger the difficulties. There are millions of individuals that experience symptoms like flash backs, nightmares, and negative thoughts that interfere with their daily lives (APA, 2020). Avoiding these triggers can every so often lead to isolation, leaving the victims feeling undermined or misunderstood. Linning & Kearney (2004) also defined PTSD as the presence of a traumatic event, a continuous recapturing of the event, the avoidance of the situation, the numbing of responsiveness and hyperarousal. In other words, the symptoms of PSTD fall into three main categories. That is, intrusive, arousal and avoidance. Figure 4 shows the circular symptoms of PSTD.

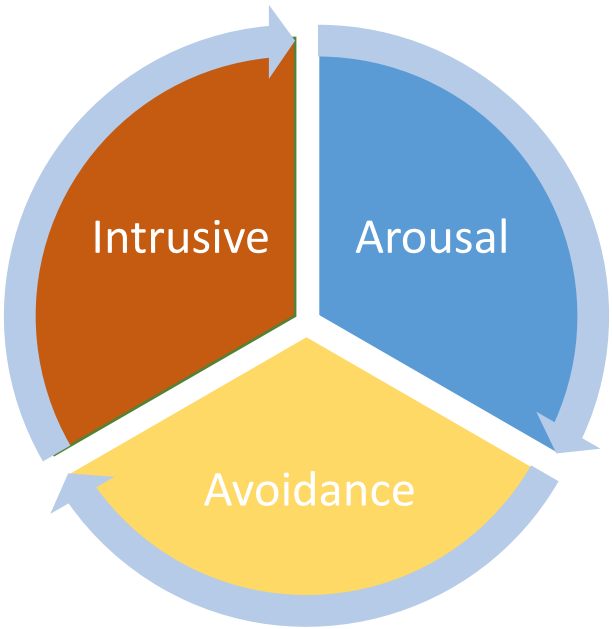

Figure 3: Symptoms of PTSD (constructed by the author based on Linning & Kearney 2004).

Intrusive symptoms the most likely affect the person's daily routine in a way that the victim re-experiences the flashbacks of the trauma, nightmares, and sometimes frightening thoughts. Whereas the Arousal symptoms such as anger outburst, difficulty sleeping and are usually persistent that can cause the victim to be stressed and agitated. Finally, the avoidance symptoms where the victim avoids places, events, objects, or thoughts that remind them about the trauma. This is due to the way the brain processes a wide range of ordeals which may include the death of a loved one, domestic violence, injury or critical illness, rape, abuse, war, and natural disasters.

After traumatic events, there are noticeable changes in the survivors' perceptions and beliefs about themselves, the world, and the future, probably leading to negative emotional responses and maladaptive actions, thus contributing to the development and maintenance of PTSD (Lee

et al, 2018). In 2001, the incidence range of PTSD in children after sexual or physical abuse was stated to be 21% to 55% (Linning & Kearney, 2004).

2.5 Support to Victims

Researchers have highlighted that every 1000 people raped, only a few hundred report their rape because victims feel embarrassed, or afraid to notify the police friends or family about their experience (CDC, 2020). A lot of people have recovered from sexual trauma and it is strongly recommended for victims to go for an evaluation with a mental health professional who could point out all resources available. Treatment plans are made through mutual discussions between the patient and the health professional; commonly suggested treatment options may include psychotherapy, specific medication to manage symptoms, self-care practices (APA, 2020). Above it all, the key role to recovery is family social support, acceptance, and empathy (Northcut & Kienow, 2014). Many countries have online services on how to support survivors. For instance, Crisis lines, Counselling, Support groups, Court/legal advocacy, Medical/emergency room advocacy services and Shelter services. In Finland, there are is a 24 hours and 7 days a week open helpline called Nollalinja which one can get support and shelter called Tukinainen to support victims of sexual violence (info Finland, 2019).

3 Goal and Aim of Research

The goal of this thesis is to explore how the support can be given to the victims of sexual violence to prevent post-traumatic stress disorder. The aim of this study is to create guidelines and investigate the effectiveness of recommended support to sexual violence victims to prevent post-traumatic stress disorder.

The main research questions for this integrative review include:

1. What are clinical and practical procedures to be followed while supporting sexual violence victims?

2. How effective are the clinical and practical procedures used to support the victims of sexual violence?
3. What are the existing evidence-based recommendations for effective support to sexual violence victims?

4 Methods

This thesis development was built using an integrative literature review. This thesis study process was initiated in December 2018 when the author chose the topic and represented it to the supervisors who were very encouraging and gave a go ahead to writing the thesis plan. The interest into the topic was gained and inspired at the International conference on the survivors of Rape which took place 10th – 12th.12.2018 in Helsinki Finland. Since the last Istanbul convention, Finland has been working hard to improve services for sexual violence victims but there is not enough research about the victims' perspectives about the support. The research method chosen was Integrative literature review in order to present the on-going state of science around the given topic. The study was finalised in November 2019, and the thesis was mostly made during the author's free time since the author works fulltime. In table 3 there is an illustration of the thesis schedule.

Phases	**Schedule**
Planning Phase: • Topic selection, research question creation, protocol validation, and search of topic relevance. • Thesis plan presentation	• October 2018 • December 2018
Implementation Phase: • Literature search • Primary studies' selection. • Data extraction • Data analysis • Data reporting	• November 2019 • November- December 2019 • January – March 2020 • March 2020 • April -May 2020
Presentation Phase: • Thesis submission	• May 2020

Table 3: Thesis Schedule

4.1 Integrative Literature Review as A Research Method

An integrative literature review was implemented for this theoretical study, as this comprehensive research review methodology offers the ability to synthesise and analyse information from significant studies to a particular topic. It is used as a tool to determine available knowledge about a topic, locate both classic and the most recent research information, and help plan the study methodology (Nieswiadomy & Bailey 2018, p.92). The three main reasons

for any type of literature review are proved understanding, demonstrate knowledge, and update the readers. Polit & Beck (2004) point out an important function of literature reviews for nurses in the research process being, to develop an evidence-based practice. The major reason why an integrative literature review was chosen in this research is that there is not a lot of literature concerning sexual violence in Finland. Selecting an integrative literature review for this topic avails us with the possibility to review previous research and assessing the effectiveness of specific application or interventions (Thomas & Hodges 2010, p.105).

Literature reviews help in building a foundation for studies, inspire new research ideas and play a big role when researchers are explaining their findings (Polit & Beck 2004, p.88). If an integrative literature review is well executed, it can be suitable for synthesizing the literature to date on subjects with limited or preliminary research. According to Snyder (2019), integrative literature reviews are essential and projected to report fresh emerging issues. Our purpose as researchers is to see where the loose ends of the literature on a particular topic and figure out what next, we need to contribute to the research. It is necessary for a researcher to create a framework as soon as he familiarizes with the present literature in order to allocate the study results (Nieswiadomy & Bailey 2018, p.92).

The patient, intervention, comparison, outcome & Type of question asked (PICOT) model strategy was used to build the research question and manage material resources. Adequate research questions constructed using the PICO strategy gives an allowance for the correct definition of which evidence-based information is needed to solve clinical research questions, maximise recovery of evidence in the database focus on the scope of research and avoid irrelevant searching (Santos, Pimenta, & Nobre, 2007).

In this study, the PICOT was, ‘How does constructive support to sexual violence survivors reduce/ prevent Post-traumatic stress disorder?’ The target population (P) of this study is rape or sexual violence victims, the intervention focus being constructive support, survivors who don’t receive support are the comparison group, and the study outcome of interest is effective support to the sexual violence victims and reduction or prevention of PSTD. Thus, creating the answerable question of the study as ‘Does constructive support to sexual violence survivors reduce/ prevent PSTD?’ Figure 5 illustrates the PICOT model of the study.

The aim of the PICOT question is to offer a structure for the development and conduct of the review. Both Cochrane and Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) utilize PICO as their structured approach to framing the question (Smith, Marrow & Ross, 2015, 21). In other words, if a good question is formed, it will support the review and if a poor one is formed, it risks perplexing the review. Meaning, to respond to identified desires and significances, a good question is very crucial.

Pico question: How does constructive support to sexual violence survivors reduce prevent PSTD?

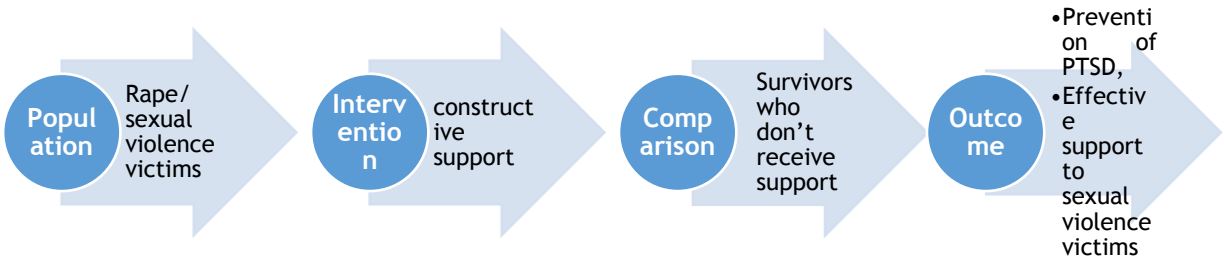

Figure 4: The PICO model of the study (constructed by the author based on Santos, Pimenta, & Nobre, 2007 PICOT strategies).

4.2 Inclusion and Exclusion Criteria

The first and foremost step while defining a search strategy to identify relevant review literature is setting inclusions and exclusion criteria basing on the review question (Smith, Marrow & Ross, 2015, 22). Following the standard stages of identification, bibliographical referencing, data analysis and presentation, the integrative literature review is considered accurate. Inclusions were focused on the inquiry of only relevant sources of information. Researchers have the ability to make contact with specialists or organizations for more evidence after searching the tables of contents of journals on a particular topic in to increase the chances of finding important information (Horsley, Dingwall & Sampson, 2011).

The inclusion criteria that were considered during the project are: Qualitative and quantitative evidence-based articles, articles published in English, Journals relevant to the key words and research question, publication period between 2000 and 2019 and Survivors of childhood sexual violence. Table 4 illustrates the inclusion and exclusion criteria linked to the PICO model.

PICOT component	INCLUSION	EXCLUSION
Population	Female youth sexual violence survivors. Time of incident between 15 -30 years	- Population not representative of our target population. - Studies containing less than 10 people
Intervention	Intervention focussed on one of the following: (i) improving sexual violence support reducing the risk of PSTD (ii) reducing unintended pregnancies (iii) Increasing service utilization for supporting victims of sexual violence.	
Comparison	survivors who do not receive support	
Outcome	Intervention covered at least one of the following: (i) Incidence of sexual violence. (ii) Incidence of PSTD after sexual violence (iii) Reported sexual violence incidences to authority.	
Study design	(i) Articles Published period between 2010 –2020. (ii) Qualitative, quantitative and or mixed methodologies. Original peer reviewed journal articles (iii) Publication in English (iv) Journals relevant to the key words and research question (v) Grey literature	- Articles published in other languages - Articles published before 2010.

Table 4: Inclusion and exclusion principles

4.3 Data Search and Review

The data search of the study took place in November 2019. After a careful consideration, five databases were put into consideration. The chosen databases are the scientific databases which include EBSCO (CINAHL), PUBMED, PROQUEST CENTRAL, SAGE and SCIENCE DIRECT (ELSEVIER). For a thorough search approach, each of these databases need to be searched question (Smith, Marrow & Ross, 2015, 24). To make sure that is as comprehensive as possible, the researcher put into consideration the different words which authors might have used which are relevant to this topic. Both keyword searching and subject heading searching were used. The importance of including Boolean operators in a search strategy is, they help generate a responsive and particular search for the posed question (Smith, Marrow & Ross, 2015, 24). Figure 6 shows the different concepts used in this comprehensive search.

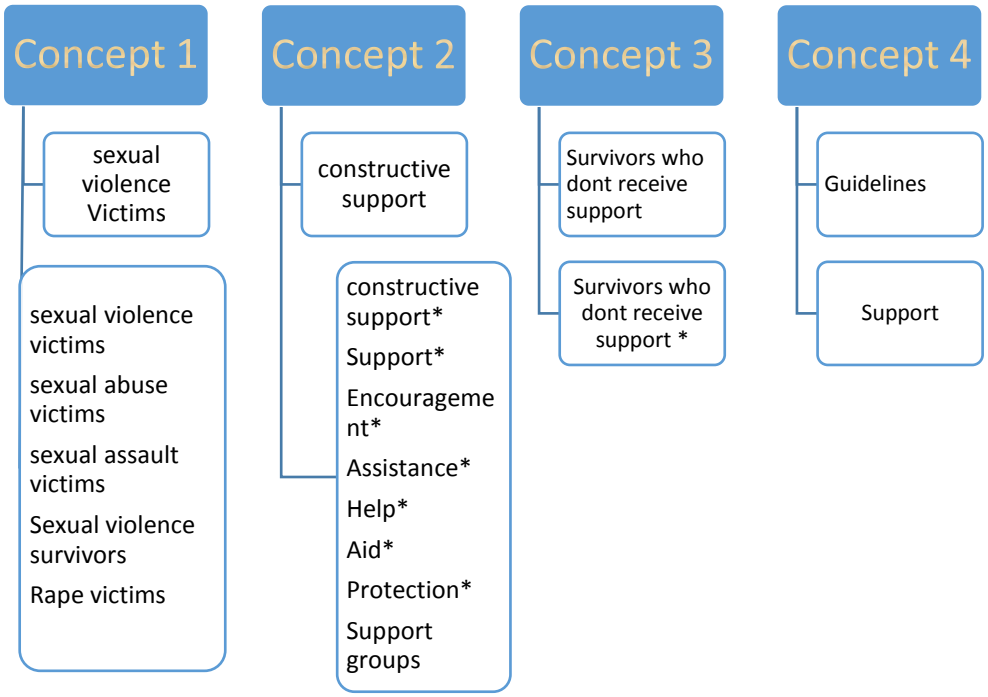

Figure 5: Concept mapping

To integrate the formed PICOT question of 'How does constructive support to sexual violence survivors reduce/ prevent Post-traumatic stress disorder?' into the data to search, the main concepts were selected to be combined with the Boolean operators to smoothen the search process. To really address as may options as possible, the built concept map in Figure 6 was followed. This concept map aided the toddling together as much as possible concepts options in combination with the Boolean operators 'OR' and 'AND'.

In order to conduct an organised data search, six hierarchy steps in Figure 7 were put into consideration. Firstly, the researcher first took a look if there are any other systematic reviews that have been conducted at the primary level of the studies which would accumulate in relation to the question and observed to synthesis the best available evidence amongst them.

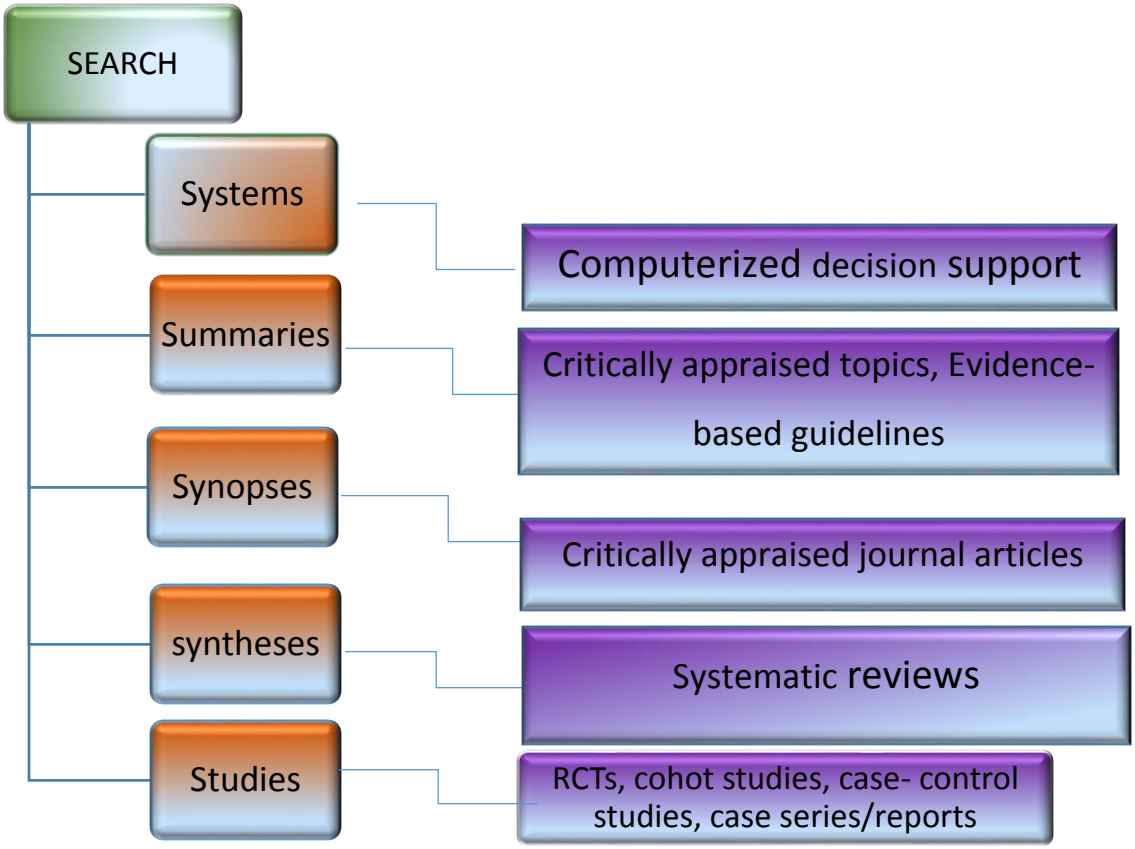

Figure 6: Six data search hierarchical steps

For easier management of the literature, the researcher used RefWorks software for literature organisation, storage and reading the literature. Firstly, all the references were saved to RefWorks for storage. Secondly, all duplicated references were singled out and deleted. Then the remaining references were screened whether they match the inclusion and exclusion criteria of the study. Lastly in February 2020, the relevant full text references were briefly read through by the author and also assessed their quality using assessment development tools for systematic literature reviews and the best literature in line with the study topic were chosen.

4.4 Quality Assessment

In evidence-based practice, critical appraisal is considered as significant skill for health professionals as part of their work (Higgins et al, 2019). Selecting a legitimate assessment tool is demanding but can be eased by continuous reference to one's review question and thorough

analysis on condition that the problem has been tackled in the literature. At the quality assessment stage of the research, it is recommended to be very prudent, that is, if the relevance of an article is uncertain from the abstract then it could be marked as a potential article (Smith, Marrow & Ross, 2015, 25). To make the interpretation of the results easier, users of systematic reviews need to know what the authors did and what they discovered for clear reporting. For the health care interventions safety, it is essential to accurately, and reliably summarize evidence related reporting to efficacy and safety, systematic reviews and meta-analyses are vital (Liberati et al, 2009). It is very essential to evaluate the quality of the literature included in any systematic review because most readers are concerned about garbage in garbage out. Reviewers are required to capture your own main results, involving strengths and limitations, intensity for each outcome, and the importance to various population groups (Smith, Marrow & Ross, 2015, 32).

Compared with traditional narrative reviews, integrative reviews have an advantage of involving a comprehensive, objective and re-creatable search of a variety of sores within limits to identify as many suitable studies as possible thus minimizing bias and achieving more reliable assessments (Lefebvre et al, 2019, section-4-2-2). It is important to select and appropriate particular the system to assess the risk of bias. In the 2005 Cochrane workshop, a new risk of bias the assessment tool containing six domains was agreed on: these included types of stages bias for instance, in detection, in collection, in presentation, in attrition and other research stages (Higgins et al, 2011). It should be put into consideration that for each review, whether the interpretation of the findings is more essential than bias (Smith, Marrow & Ross, 2015, 29).

The diversity of research approaches has increased a challenge for integrative reviews is by increasing a demand for heterogeneity. This was traditionally inacceptable although might not be appropriate in the aura of intricacy due to the sufficient engagement with complex interventions thus circumstances demand the integration of heterogeneous data forms (Lorenc et al, 2016). Lorenc et al. also indicated that recent methodological approaches for instance realist synthesis, mixed method merging qualitative and other forms of data alongside quantitative synthesis, qualitative comparative analysis, are some of the propitious movement towards negotiating heterogeneity.

Occasionally, it is recommended for the researchers of integrative literature review to set a limit. For instance, to set a limit on the minimum sample size or minimum number of incidents. To give an example, barring out articles consisting of less than ten people against other groups. In the Cochrane book (2019) Higgins, Eldridge & Li emphasis the recommended importance of discarding groups that are not relevant to comparison at hand and combining multiple groups that are eligible as the intervention to create a single pair-wise comparison. In addition to control quality or reduce the risk of bias, it is recommended to make a table identifying each

of the aspects of bias risk and pointing out where the study adequate each element. In order to display what was found about the studies quality, and controlling to minimise the risk of bias in this research study, three different tools were considered, that is, Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), STROBE and Critical Appraisal Skill Programme (CASP).

One of the highly recommended critical appraising tools for reporting systematic review and meta-analysis is the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). It was created in 2005 by a bunch of 29 review writers, clinicians, health editors, methodologists, and customers to help authors of systematic reviews to widely report and evaluate the advantages and damages of healthcare interventions (Liberati, Altman, Tetzlaff et.al, 2009). The PRISMA focuses on reviews evaluating random trials. It aims on conducts writers use to certify the transparency and complete coverage of systematic reviews and meta-analysis (Liberati, Altman, Tetzlaff et.al, 2009). In this research, the PRISMA four phase diagram was followed. That is, after an electronic search of the databases, a total of 344 articles were identified, among which 160 articles considered possibly relevant after reviewing their titles and abstracts. After eliminating the articles not meeting the inclusion criteria, the final review included 12 articles. A 4-four phase flow diagram illustrating the selection process is in Figure 8.

Critical Appraisal Skills Programme (CASP) is a ten-item checklist designed as an assessment tool for qualitative studies. CASP tool is presented as a checklist consisting of preliminary screening and subsequent questions to guide in the appraisal of qualitative research (Mills & Birks, 2014, p.230). To choose CASP as the appropriate critical assessment tool for the selected qualitative studies, the researcher generally read through the studies first, decided the design which is described in the studies, and then worked through answering the CASP screening and detailed question as displayed in CASP checklist (i) in Appendix 2. Mills & Birks (2014, p.231) also noted out that, throughout the phase of screening qualitative studies, the assessment should confirm the intent of the study whether it was to interpret or to review the practices of the phenomena from the views of the research participants.

The mixed method approaches of research have recently been on the rise. Mixed-method approaches merge together the both qualitative and quantitative components of data collection and analysis (Hurmerinta-Peltomäki & Nummela, 2006). The mixed method approaches of research also need a critical appraisal tool which is specifically for them in order to get an appropriate assessment. In this paper, quality assessment for the selected mixed-method studies was done using the mixed-method appraisal tool (MMAT). Mixed-method studies are not considered as the best choice of studied but if well explored, they have several benefits (Hurmerinta-Peltomäki & Nummela, 2006). Checklist (ii) in appendix 3 shows the selected mixed-method studies' quality appraisal.

Observational studies for instance as cohort or case control studies have dominated the health care research system. These studies are known to have a significant proportion of research, can be valuable but also have a disadvantage of high risk to bias reporting (Vandenbroucke et al, 2007). The recommended tool for assessing the quality of methodology of these studies is strengthening the reporting of observational studies in epidemiology (STROBE) statement. STROBE is one of the recommended quality assessment checklists in general to measure the reporting of observational studies. The STROBE checklist is advantageous in reporting strengths and weaknesses of study results during integrative literature reviewing (Vandenbroucke et al, 2007). To assess the quality of the selected observation studies, Checklist (iii) in Appendix 3 was created following the STROBE statement.

A grading scale for evidence was used in order to assess the quality of ten selected studies. Of the three checklists used for quality appraisal, both qualitative studies scored 87%, mean of observational studies was 85,7%; individual study score raged between 64% -100%, and Mixed-method studies ranged between 67% - 100% scoring a mean of 91,25%. Basing on the mean value of the studies, all studies were of moderate – high quality even though some observational studies prevailed a risk to bias.

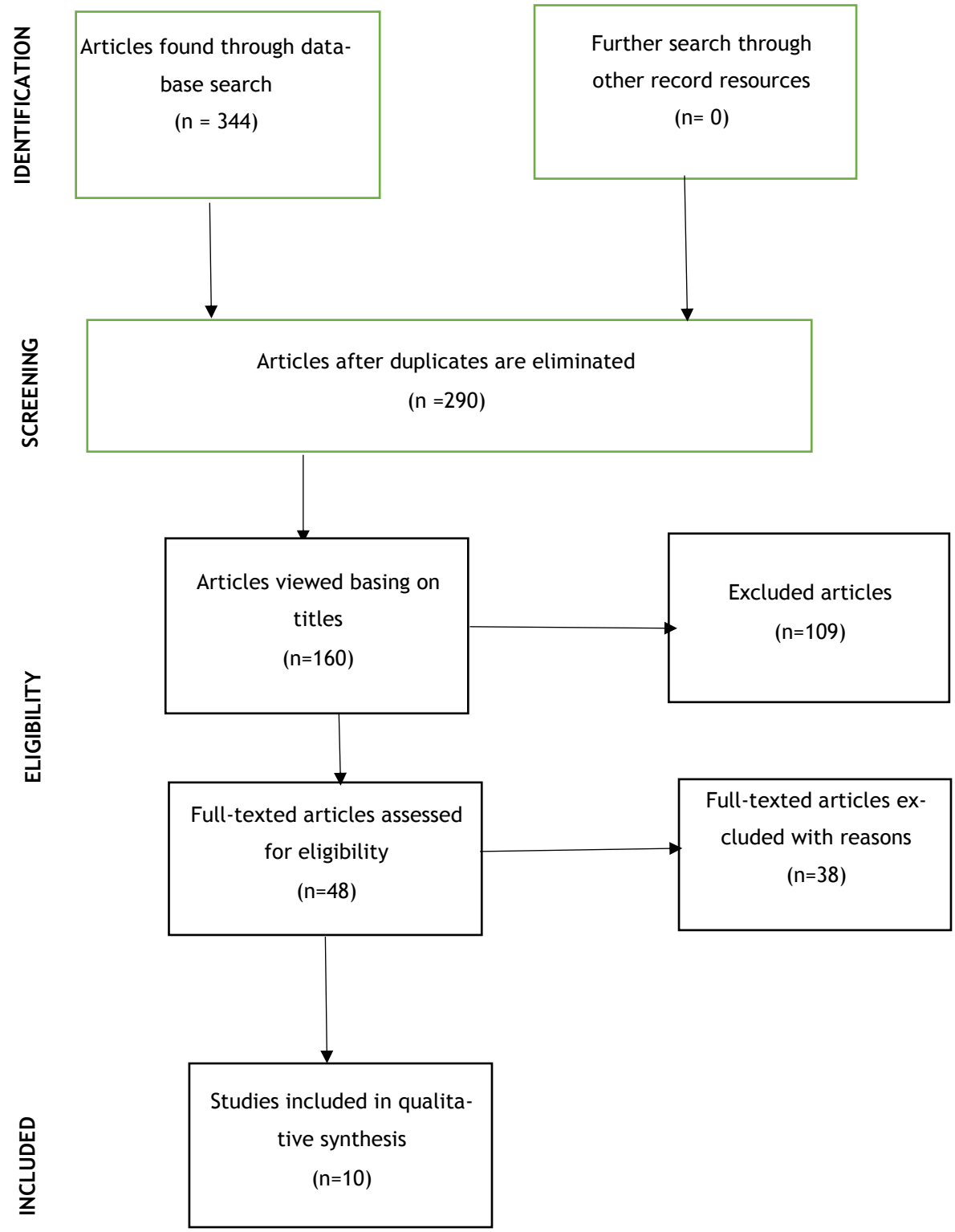

Figure 7: PRISMA flow chart of the data selection process.

4.5 Data analysis

Integrative review data analysis is the process of gathering, arranging, transforming, and demonstrating data to assess essential information for a researcher to answer research questions. Whittemore and Knafl (2005) refer to integrative review data analysis policies as one of those that lack development, however one of the most complicated features and prone to error. Integrative literature should transparently display how the integrative and data collection was done (Snyder. 2019). The data analysis stage for this study was stated after the selected studies had been evaluated and following Whittemore and Knafl (2005), Figure 9 was modified to illustrate the data analysis stage of integrative literature review.

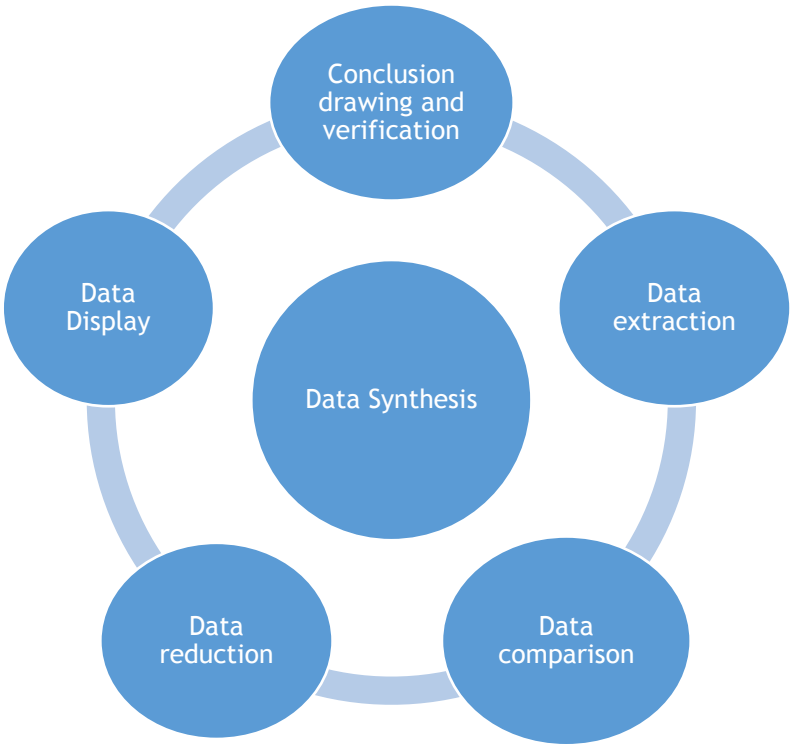

Figure 8: Illustration of the data analysis process modified by the researcher following the Whittemore and Knafl (2005).

All selected literature was recurrently read discrete by the researcher in response to the research questions. Appendix 1 displays an evidence table for the studies included in the literature review. Data was extracted from the databases organized, coded, and compiled. The next stage of data extraction is data comparison to find linkage and outlines. Data comparison was done in this study through excel spreadsheet. Results were then verified and written in response to the research questions of the study and the results were grouped into themes. The other issues put into considerations were the limitations of the study, future research recommendations and practice implementation.

5 Results

A total of 344 references were found after an electronic and manual data search. Of which 54 articles were removed because of duplication and 290 articles remained for in depth screening. First and foremost, the researcher assessed the titles and abstracts of the remaining articles, reducing the number to 160 articles. Then, the selected remaining full text articles were reviewed leaving and additional articles were eliminated due to various reasons which included: irrelevance to the topic of the study, the narrative research approach, thus cutting the number to 48 articles. Lastly, after ten articles which were included in the final results after narrowing down by applying the inclusion and exclusion criteria. There were no articles eliminated due to the low quality of research. Figure 10 shows the process taken during the data review in this study.

5.1 Selected studies' report.

The ten selected studies included observational studies (n=4), the mixed method studies (n=4) and qualitative studies (n=2). The selected studies were all conducted between 2002-2016 making evidence included in the studies being recent since most of the studies were completed between 2003 and 2016. Of the selected studies, three were published in 2019, one in 2017, two in 2015 and four between 2014 and 2010, giving almost half (50%) of the studies being published between a five years period. The studies setting were diverse and included Africa (n=1), Europe (n=3), Asia (n=1) and America (n=5). In this section, reports the five main themes that emerged while synthesising the selected literature. The emerged themes are: The consequences of sexual violence, current support for sexual violence victims, and effectiveness of the clinical and practical procedures used to support the victims of sexual violence, barriers to constructive support, and recommendations of effective support to survivors.

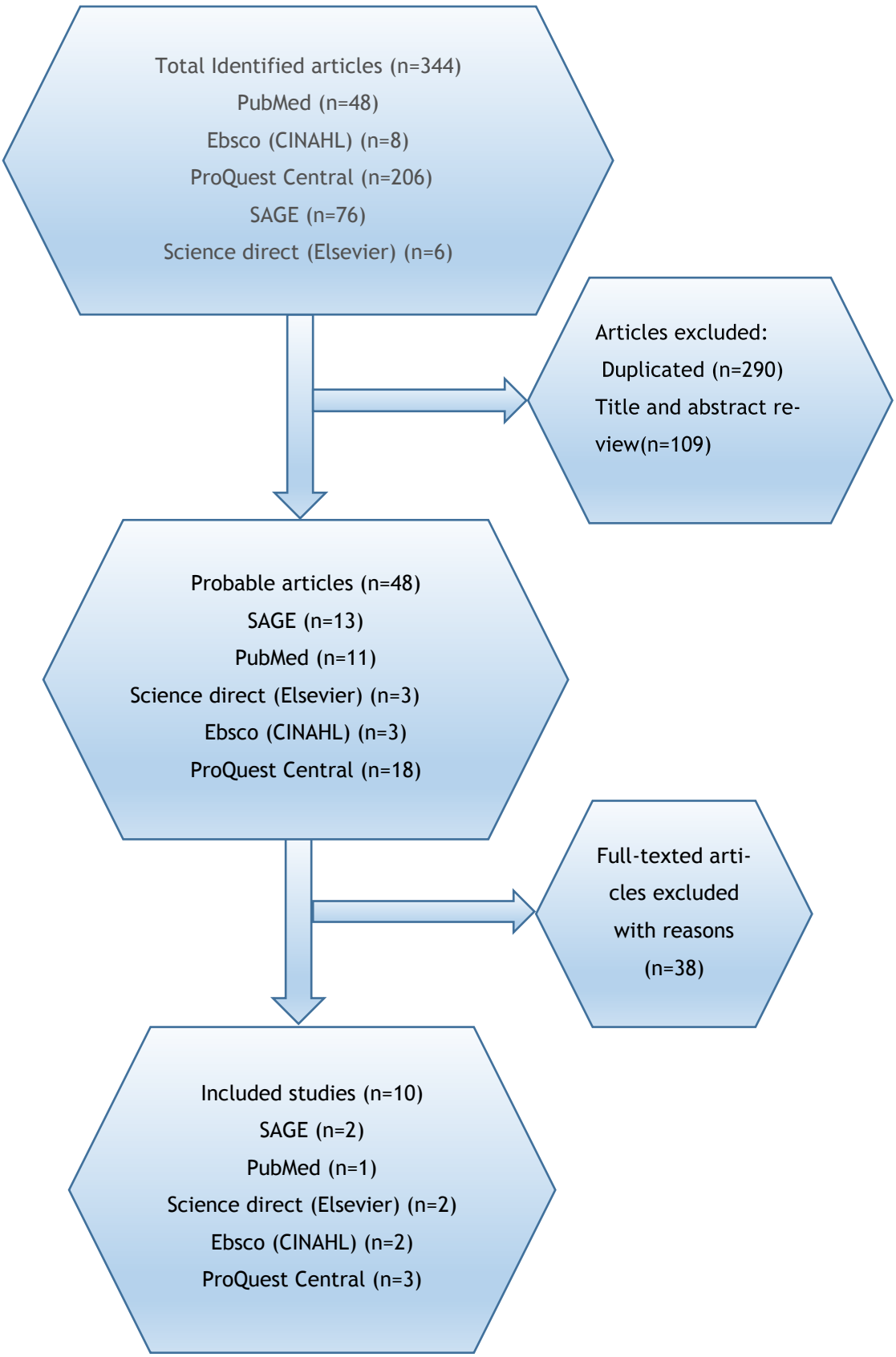

Figure 9: The study's procedure of data review

5.2 Consequences of sexual violence

More than a few studies stated different behavioural and emotional symptoms which victims conveyed or attained after victimisation. A couple of studies reported that after sexual violence, participants acquiring symptoms, for instance hypervigilance, cognitive distortions which are symptoms strongly linked to post-traumatic stress disorder (Wilson, 2010; Fong, Bennett, Mondestin, Scribano, Mollen & Wood, 2015; Puffer, Kochman, Hansen & Sikkema, 2011; and Peeters, Vandenberghe, Hendriks, Gilles, Roelens & Keygnaert, 2019). Some victims treated in the emergency department were reported suffering from physical outcomes such as noticeable injuries both mild and severe, genital injuries, pregnancies, and diagnosed with a sexually transmitted disease (Gilles, Manigart, Rousseau, Libois, Gennotte & Rozenberg, 2019; and Darnell, Peterson, Berliner, Stewart, Whiteside & Zatzick, 2015). Moreover, Peeters et al (2019) and Schönbucher, Maier, Mohler-Kuo, Schnyder & Landolt (2014) stated that some participants battled with sleeping disorders, anxiety, powerless and emotionally dependent on the offender. Additionally, studies by Peeters et al (2019) and Puffer et al (2011) described the severe symptoms of sexual trauma were a destruction of participants' relationships, the loss of sexual drive, negative influence on self-care, drug abuse and unhealthy sexual behaviour.

The study by Peeters et al (2019) expressed some concerns about the financial burden. The participants were overwhelmed by the expenses since they had to pay for different services. For instance, the psychologist payments were not compensated by the government but they forty to fifty euros precession which added up to about three thousand to four thousand euros per year. Caregivers were also partially affected, and some studies reported consequences they faced. According to Fong et al (2015), sexual violence in cases of childhood sexual abuse, caregivers were also affected with noticeable consequences which included guilt, disbelief, devastation, and internal misery. A study done on the mothers of sexually abused children in South Africa by Masilo and Davhana-Maselesele (2017) also indicated significant levels of depression ($p=0,576$) meaning that the participants were battling with some kind of trauma.

5.3 Support for sexual violence victims

This subsection will report the different forms of support revealed from the included literature. Support was is commonly reported by all studies. They outlined different types of support given to survivors and these emerged in four different categories which included legal support, medical or emergency support, psychological support, and other forms of support.

5.3.1 Legal support

Two studies were reported about the prevalence of contacting the legal system. Darnell et al (2015) reported 67% of the participants had contacted the legal system well as Peeters et al (2019) reported 44% of the participants who contacted the police. According to Peeters et.al

(2019) support from legal services was available for all sexual violence victims despite the time of the incidence but the legal limitation period in Belgium was up to 15 years from the incident and 38% pressed charges after a longer period of the incident. In another study (Macy, Giattina, Montijo & Ermentrout, 2010), the executive directors of agencies pointed out the importance of legal advocacy in supporting victims at the agencies.

5.3.2 Medical /emergency support

Examinations after sexual abuse were reported by several studies. Patients who requested legal support were recommended to go for an examination, given emergency medication and follow-up consultations at the emergency hospital and sexual assault agencies (Gilles et al, 2019; Peeters et al, 2019; Schönbucher et al, 2014; Macy et al, 2010; and Darnell et al, 2015). A sexual abuse examination by a nurse was done on arrival to the emergency if sexual abuse was suspected. Follow-up sessions and consultations were encouraged and organised for victims. Gilles et al (2019) surveyed in their study that health professionals at the emergency hospital urged victims to go to two follow-up consultations, at the gynaecological and the HIV outpatient clinics. They also highlighted that of all the participants, 46% attended the consultation follow-up at the HIV clinic and 22% attended the consultation follow-up at the gynaecological clinic. In Peeters et al (2019) study, patients seek medical support from a general practitioner and were mostly certified about the care.

5.3.3 Psychological support

One of the most common support strategies reported by almost all studies was the social cohesion. These coping skills groups strategy enabled participants to feel confident enough to narrate their trauma experiences, understand trauma indicators, enable solidarity, and reduce behaviour problems (Puffer et al, 2011; Schönbucher et al, 2014; Macy et al, 2010; Fong et al, 2015). These groups aimed at encouraging victims to open up about experiences and consequences they faced with the group as early as possible but those who could not were asked to write journals to read out in the group.

Likewise, Puffer et al (2011) and Wilson (2010), stated additional activities of group stress management classes which were organised, and cognitive restructuring strategies like inward focus and application of selfcare were applied. In these groups, acronyms were used for instance the Safety, Intimacy, Power and Self-esteem (SIPS) to present optimistic relationship features. However, in the study done by Shahali, Riazi, Alaei, Emamhadi & Salmaney (2019) about social support and self-esteem in the victims of sexual violence, statistics showed that participants received less social support compared to the control group of the non-sexual violence victims.

Shelter services were frequently recommended to victims who needed to get away from their perpetrators, late night arrival stays or victims who need 24/7 on-site support and an increase in the number of these facilities was under discussion (Macy et al, 2010; Schönbucher et al, 2014; Macy et al, 2010; and Peeters et al, 2019). Additionally, Schönbucher et al (2014) reported 50% of the participants had received support from a counsellor or a psychotherapist and 33% had been recommended to a psychiatric institution. The 55% of caregivers in United States (Fong et.al, 2015) linked their children to mental health services and Peeters et al (2019) also reported 92% of the victims in their study done in Belgium had an option to contact psychiatric and psychological care but psychological care from a psychologist was not reimbursed by the government. In the same study, 23% of the victims got access to a relationship counsellor later in life to work on their relationship struggles. Similarly, Puffer et al (2011) sexuality support was given to the victims during the copying skills classes.

5.3.4 Other Support system

Various members of the victims' social network emerged as the source of support systems from the literature. A study conducted in Switzerland (Schönbucher et. al, 2014) revealed different support systems adolescents had received which included peers, parents, intimate partners, siblings, schools, and other people. In another study done by Peeters et al (2019), 85% of the victims sought support from a family member, these included siblings, peers, either parent, or a close relative. In one study by Macy et al (2010), agencies also accepted volunteers to provide counselling services to the victims

5.4 Effectiveness of the clinical and practical procedures used to support victims of sexual violence

Shelter services and medical examinations were considered very critical. Macy et al (2010) mentioned that agencies considered them helpful for victims' communication and education about victims' compensation. The study in the united states by Darnell et al (2015) also showed a strong link between having social support and follow-up attendance. The victims who attended support groups were the most likely to go for a follow-up. However, in a study by Fong et al (2015) they noted that caregivers were not aware of the existence of these mental health services before recommendations from the physicians.

Several aspects of the provided treatment procedures were reported successful by victims, caregivers, and agency managers but empathy was highly mentioned in most studies (Fong et al, 2015; Wilson, 2010; Puffer et al, 2011). Patients spoke highly of the ability to access the

emergency hospital at any time 24/7 even though some victims found the emergency examination extremely uncomfortable and would have preferred not being examined with a speculum during that time (Peeters et al, 2019).

Coping skill groups was stated to have quick results towards openness, vulnerability, trust, emotional safety, planful problem solving and bonding from the very first sessions because victims realized that they all shared the similar experiences (Puffer et al, 2011; Wilson, 2010; Schönbucher et al, 2014; and Macy et al, 2010). Participants in Puffer et al (2011) studied acknowledged that these copying strategies had availed them with improved control and freedom. Wilson (2010) as well reported a significant reduction in dysfunctional behaviour, the stress levels measure before the stress management classes had also significantly reduced and participants were appreciative of the self-care skills introduced in the programme. However, in the study done by Puffer et al (2011) about the LIFT group copying intervention, the researchers observed some discomfort by a small percentage of victims who did not disclose their experiences which triggered other victims who had narrated their stories.

Various studies highlighted the importance of the reaction to victims opened up to first. Being positive, empathetic and a listener was extremely important in their healing process and they spoke positively about therapists because they think that they were being listened to (Puffer et al 2011; Schönbucher et al, 2014; and Peeters et al. 2019). Peeters et al (2019) added that Some ties were lost because of the reaction of friends and family members after victims opened up about the violence incident consequently leading to social isolation. The executive managers of sexual assault agencies emphasised the importance of emotional responses to victims as a step to healing (Macy et al, 2010).

Macy et al (2010) underlined the necessity of having a 24/7-crisis hotline as a very crucial strategy to effective support because violence can occur at any time, a way to inquire information, and a short-term crisis interference. In a study done in Belgium by Peeters et al (2019), all participants emphasised on the gender importance of the police personnel who handles the victims' case. Both male and female victims were satisfied when they received female officers to handle their cases.

For those victims who received parental support, spoke highly how it contributed to their healing because they initiated legal steps and treatment; statistics reported a strong link of caregiver support and offender being outside the family (Schönbucher et al, 2014). There was also a slight 15% of the victims who did receive support from their partners and claimed that the sexual violence incident has improved their relationships (Peeters et al, 2019).

5.5 Barriers to constructive support

Multiple studies were reported having difficulty finding psychological care as a major barrier of not connecting to psychological care. It was challenging finding an educated therapist and more so finding a paediatric one for adequate psychological care left victims in the studies ranging from 53% (Fong et al, 2015) to 81% (Peeters et al, 2019) without access services. Moreover, there was a challenge of improper coordination and communication between providers which put a lot of tension on the survivors because they had to repeat their stories all over again.

Several studies indicated a strong link between insufficient funds and victims' not engaging in psychological care. Peeters et al. (2019), reported that high costs of psychotherapy services affected 63% of the participants' participation into less therapeutic care than they had anticipated since psychotherapy was not yet reimbursed in Belgium thus costing victims up to three to four thousand euros per year on therapy. In one of the studies taken in the united states (Fong et al, 2015), caregivers without insurance coverage also found it hard to provide necessary services to their children due to the huge expenses. Not only where the victims faced by financial constraints, but also sexual assault agencies faced difficulties providing victims with mental health specialists at the premises and attaining uninterrupted shelters for victims (Macy et al, 2010).

Darnell et al (2015) noted a strong correlation between victims' follow-up attendance and being with the developmental or other disabilities, current mental illness, or history of public assault. Agencies encountered a conflicting loyalty between keeping the location of the shelters easily publicly accessible and keeping a low profile in the protection of the victims (Macy et al, 2010). The same study also noted that these shelters cannot accommodate victims for longer-term requirements which is a huge barrier to those who need the services longer.

Macy et al (2010) reported that sexual violence agencies faced the lack of the screening process which had affected their services in the past when victims with severe mental illness or addiction problems attempted to attend support group meetings and access shelter services. Additionally, it was heard to provide services to victims who have faced both domestic and sexual violence because there were only two separate groups of either sexual or domestic but not both. Puffer et al (2011) observed screening process failure among victims placed in support groups that were not yet ready to disclose their stories thus bringing out annoyance from those who had disclosed their stories.

Numerous studies reported caregivers to victims who experienced sexual violence at a younger age were mostly linked to the barrier of accessing support. Victims reported that their caregivers did not believe them nor support them emotionally; some of the caregivers were emotionally unstable or underestimated the severity of the victims' psychological consequences (Puffer

et al, 2011; Schönbucher et al, 2014). In another study by Fong et al (2015), caregiver stated that, mental health support was not necessary because their children were too young to attend therapy and had a fear of re-traumatization or stigmatization of their children. Schönbucher et al (2014) findings displayed how the absence of parent support can deeply damage the child's healing/coping process after sexual abuse.

5.6 Evidence-Based Recommendations for Effective Support to Sexual Violence Victims

Almost all selected studies has declared family support as the best support system, and multiple studies have mentioned caregivers as being secondary victims after discovering their children's sexual abuse. Masilo & Davhana-Maselesele (2017) recommended that policy makers should find a way to support, practical information and legal protection to the caregivers of sexually abused children in order to be able to support their children. This same study also suggested support platform groups for caregivers to develop copying skills.

Victims did not like the fact that they were sometimes forced to press charges. Victims recommended in one study by Peeters et al (2019) the need for separating healthcare services after sexual violence experience with filling charges. They added that victims should be given time to decide whether they want to file charges yet. In the same study the victims stated that the period one to report the sexual violence incident was too short and they recommended the extension of the legal limitation which is has been limited to 15 years in Belgium since November 2011.

There were suggestions of moving all the acute care to one place that is legal, medical, and psychological care to improve the flow of care, reduce clinical trauma and reduce transportation costs (Peeters et.al. 2019). In the same study a sexologist was also suggested as an addition to the rehabilitation journey. In two studies, it was suggested that the name 'victims' should be avoided and use survivor to increase encouragement to focus on the future than the past events of sexual abuse (Puffer et al, 2011; Peeters et al, 2019). In the study (Macy et al, 2010) for executive director's perspective, they advised that advocates should be careful not to give victims legal advice

All participants thought a twofold community awareness is very necessary to educate about sexual violence. Firstly, on to educate the perpetrators all forms of sexual violence and secondly community education on how to treat and react towards a sexual violence survivor (Peeters et al, 2019). It was also recommended for agencies and community to collaborate to create positive relationships for survivors when they re-integrate. Puffer et al (2011) recommended participants to continue with support groups and individual therapy in which they were already participating in as long as they felt the need. Accessibility of children's services was

considered lagging in the study of executive directors; they highlighted that children's services are still very rare yet the most of sexual abuse happens at an early stage (Macy et al, 2010).

6 Discussions

The major objective of this study was to explore the literature on the current nature of support accessible to sexual violence victims to accomplish the goal of giving constructive support to the victims of sexual violence and prevent post-traumatic stress disorder. The analysis of the study was focused on answering the three presented research questions.

Firstly, are there clinical and practical procedures followed while supporting sexual violence victims? The evidence revealed that there were various types of support provided to victims which included legal, medical, or emergency, psychological, and other support accessible for victims. Previous studies also demonstrated that support to sexual abuse victims psychologically and medically were considered effective in countries with well stated guidelines and procedures to support victims (WHO, 2002). It was observed that the kind of support to victims to prevent post-traumatic stress disorder is highly influenced by the victim's social network. Most of the victims linked to at least one of the support systems but there was no evidence for any victim attending all the four support processes. Moreover, there was no evidence on the order followed for victims to gain access to support since it was stated in some of the studies that a victim would seek medical support and not press legal charges.

Secondly, how effective are the clinical and practical procedures used to support victims of sexual violence? The results indicated that most of the support procedures used were effective in that the victims spoke positively about them. The results reveal that coping skills groups were exceedingly effective in a way that victims were able to open up about the experiences which is one of the most important steps in defeating trauma. Previous studies too have shown that most copying intervention components have strategies that positively affect the recovery process of victims (Walsh, Fortier & DiLillo, 2010). Furthermore, evidence also revealed the importance and effectiveness of shelters with services 24/7 to be accessed by victims. These shelters also have hotline numbers to advice and give guidelines. Likewise, in Finland a 24/7 hotline and shelter services are provided through a rape crisis centres such as support centre for victims of sexual violence in Helsinki (SERI) and 'Tukinainen' vaguely translated as woman support (Info Finland, 2019).

However, there were some barriers faced by victims which affected their attendance. Previous studies highlighted the difficulty of finding psychological care due to lack of enough licenced psychologists. The WHO (2002) is also concerned about the lack of trained workers to provide care to the survivors of sexual violence especially in developing countries and therefore created

strategies to for future development in the health care sector. Victims wanted to be connected to therapist to be comfortable with their recovery but were disappointed about the difficulty in finding one with expertise. Moreover, evidence revealed that most victims face a challenge of insufficient fund consequently creating a barrier to applying for psychological services. Sexual violence has a long-lasting effect on the survivors' economic well-being and highly disrupts their income power due to employment loss or time off (CDC, 2020).

Likely, statistics show that sexual violence affects everyone financially both the government and the victims. In a previous study done in the USA, it was revealed that the life-time financial burden per victim of rape went up to an estimate of $122,461(Peterson, DeGue, Florence, & Colby, 2017). For those victims who had insurance and those who have state support managed to reduce the cost but some of the costs for example a psychiatrist with a degree were quite massive. Therefore, there is a high need on other types of support to victims such as volunteers, friends, church unions and community.

Thirdly, what are the existing evidence-based recommendations for effective support to sexual violence victims? Among previous studies, there arose a few recommendations on how victims would like to get support. The main concern about all received evidence was that family was very important to get involved into the victims' healing process. Support from families is very critical and makes a difference in the healing process to many victims of sexual abuse (Safe line, 2020) Evidence pointed out how sexual violence consequences involved family disruption due to no being believed. Therefore, family and community sensitisation was much emphasised in the evidence to reduce the amount of revictimization and reduce the rates of sexual violence. Involving peers in a victim's support is said to be excellent in the victims' particular therapy (Getzel, 2013).

Additionally, evidence exposed the importance if centralisation of all victims care to promote attendance. In a recent study, it was mentioned that the reorganisation of the health care system into a centralized system has benefits of improved outcomes and cost reduction (Osterman & Vincent, 2019). For instance, if the hotline centre is the same place where one can check in to get an examination, access psychological care, shelter and legal support helps relief the fear repeating the stories to everyone. Evidence also indicated the need for longer-term shelters to ensure healing before victims integrate back to the community. Previous studies show that for many victims of sexual violence, staying at home is not safe because of the many reminders that may surround the abuse (Bein & Hurt, 2011). Likewise, in Finland the shelters are for short-term stays, but the advantage of the above professional support is given at the shelter except the examination test (THL, 2020). It was also revealed that not all victims would like to press charges immediately after victimisation and it is important to let them take their time until they are ready. In a previous study done on the survivor's views about mandatory

reporting of sexual assault offences, it was discovered that nine in ten victims opposed the act due to the fact the most of the perpetrators are people they new and did not certainly want to send them to prison (National women's law centre, 2017).

6.1 Strengths and Limitations of the Study

The strength of this study is that it gives respectable evidence and knowledge on support to sexual violence related diverse observations. There is not a lot of research on support towards sexual violence victims mainly in Finland. Integrative literature reviews that are well-conducted add strength and validity to the research sector (Snyder, 2019). This makes the current study timely. Another strength of this study is that, the study had wide-ranging inclusion and exclusion criteria. I also had appropriate quality appraisal tools were used to access the quality of the selected studies which gives the study a high-quality status. Likewise, the general quality of the studies was ranging from moderate to high quality.

The toughest limitation to this study was the unavailability of enough previous literature, this made it challenging to present evidence about the chosen subject. Well as data extraction in some of the studies was problematic due to low-quality reporting. Moreover, the selected studies included a high percentage of mixed-methods and observation studies which are considered challenging methods for researchers and having weak generalization. Nevertheless, these studies are also known for represent an in-depth understanding about knowledge.

Additionally, some studies focused mostly on female victims included literature thus causing a threat to both external and internal validity. The age of the data is another limitation because some of the literature was researched five years ago. Furthermore, the data collection process was done by one person which also affects the external and internal validity, since it is advised to concentrate on peer research. The inclusion and exclusion criteria were limited to studies published in English because it is the language the author understands the best. This may have led to the omission of some important literature and therefore may have led the study prone to publication bias.

6.2 Implications of findings for practice and recommendations for further research

According to the findings of the study, there is a future need of more research. Future research should give more emphasis to the involvement of family and other informal support towards the healing process. The WHO (2002) also recommends the government and health services to deploy international bodies and non-government organisations into the support system.

6.3 Ethical Considerations

In this theoretical study, ethical consent was not required. There was no funding sources used in this study. Even though the author has previous experience in systematic literature review, a qualified library personnel was contacted prior to the literature search to reduce the possibility of negative effect on the search and support the quality and current search. All the findings were assessed by the author as unbiased as possible; no plagiarism material was included, and references were precisely marked in the study following the university guidelines.

7 Conclusions

In summary, this current integrative study was done to obtain data connected to support towards the victims of sexual violence thus contribute to the guidelines used to support victims in Finland. The study contained ten diverse studies from different parts of the world. The research question of the study were answered as follows: From the evidence about clinical and practical procedures to be followed while supporting sexual violence victims emerged four different types of support which included legal, medical/ emergency, psychological and other types of support. Then evidence also showed the effectiveness of the procedures were mostly positive and victims were to a greater extent satisfied even though surfaced some negative effects and also raising up some barriers that to gain support. Last but not least, the victims had several recommendations that would help improve the support services to better effectiveness. Although there is a lot of recent research on sexual violence prevention, researches have ignored the victims, and this has drastically reduced resent literature on support for victims. Some important areas of research have been uncovered, for instance the involvement of informal helpers was also seen as crucial since they are the first people the victims disclose to about their experience.

References

Amnesty International. 2018. Amnesty International Report 2017/2018: The State of the World's Human Rights. London. United Kingdom.

Bein, K. & Hurt, C. 2011. Strong Foundation for Healing: Shelter & Sexual Violence. Resource sharing Project. National Sexual Assault Coalition.

Banyard, V. Moynihan, M, M. Walsh, W, A. Cohn, E, S & Ward, S. 2010. Disclosure and service use on a college Campus after an Unwanted Sexual Experience. Journal of Trauma & Dissociation. PubMed.

Castaneda, A.E. Mäki-Opas, J. Jokela, S. Kivi, N. Lähteenmäki, M. Miettinen, T. Nieminen, S. Santalahti, P. & Paloma Expert Group. 2018. Supporting refugees' mental health in Finland. Paloma handbook. Guidance, 5/2018. Publications of the National Institute for Health and Welfare.

Devlin, J, M. Hill, L. Berry, J. Felder, K. & Wilson, C. 2019. Therapeutic Practices for sexually Abused Children and Adolescents: Resources for Marriage, Family, and Couples' Counsellors. SAGE. USA.

European Union Agency for Fundamental Rights (FRA). 2014. Violence against women: an EU-wide survey. Main results. Vienna. Austria.

Getzel, G. 2013. Violence: Prevention and Treatment in groups. Routledge. New York. USA.

Higgins, J. Altman, D. Gøtzsche, P. Jüni, P. Moher, D. Oxman, A. Savović, J. Schulz, K. Weeks, L. Sterne, J & Cochrane Bias Method group. 2011. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. Research Methods & Reporting.

Higgins, J. Thomas, J. Chandler J. Cumpston, M. Li, T. Page, M. Welch, VA. 2019. The Cochrane Handbook for Systematic Reviews of Interventions version 6.0. Cochrane, 2019.

Horsley, T. Dingwall, O. & Sampson, M. 2011. Checking reference lists to find additional studies for systematic reviews (Review). The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

Hurmerinta-Peltomäki, L & Nummela, N. 2006. Mixed Methods in International Business Research: A value-added Perspective. Management International Review. Vol.46, p.439-459.

Kaplow, B, J. Dodge, A, K. Amaya-Jackson, L. & Saxe, N, G. 2005. Pathways to PSTD, Part II: Sexually Abused Children. PMC. New Jersey. USA

Koegler, E. Kennedy, C. Mrindi, J. Bachunguye, R. Winch, P. Ramazani, P. Makambo, M, T. &Glass. 2019. Understanding How Solidarity Groups; A Community-Based Economic and Psycho-social Support Intervention Can Affect Mental Health for Survivors of Conflict-Related Sexual Violence in Democratic Republic of the Congo: Violence against women. Sage: Vol.25 (3). P. 359-374.

Lalor, K & McElvaney, R. 2010. Child Sexual Abuse, Links to Lateral Sexual Exploitation/High-Risk Sexual Behaviour, and Prevention/ Treatment programs. Trauma, Violence and Abuse. SAGE. Dublin, Ireland.

Lee, A, A. Scragg, P & Turner, S. 2011. The role of shame and guilt in traumatic events: A clinical model of shame-based and guilt-based PTSD. Psychology and Psychotherapy. Theory, research, and Practice. The British psychological society. Wiley.

Lefebvre, C. Glanville J. Briscoe, S. Littlewood, A. Marshall, C. Metzendorf, M. Noel-Storr, A. Rader, T. Shokraneh, F. Thomas, J. & Wieland, S. 2019. Cochrane Handbook for Systematic Reviews of Interventions. Version 6.

Liberati, A. Altman, D, G. Tetzlaff, J. Mulrow, C. Gøtzsche, P. Ioannidis, J. Clarke, M. Devereaux, P. J. Kleijnen, J. Moher, D. 2009. The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration. PLoS medicine. Vol.6. Issue 7.

Linning, L, M & Kearney, C, A. 2004. Post-Traumatic Stress Disorder in Maltreated Youth: A study of Diagnostic comorbidity and child factors. Journal of interpersonal violence. Las Vegas. USA.

Lorenc, T. Felix, L. Pettticrew, M. Melendez-Torres, GJ. Thomas, J. Thomas, S. O'Mara-Eves, A. & Richardson, M. 2016. Meta-Analysis, Complexity, and Heterogeneity: A Qualitative Interview Study of Researchers' Methodological Values and Practices. Systematic Reviews 5, Article number192.

Mills, J. & Birks, M. 2014. Qualitative Methodology: A Practical guide. SAGE.

Ministry of Public Safety and Solicitor General, Victim Services and Crime Prevention Division. 2007. Sexual Assault: Victim Service Worker Handbook. Canada.

Mulongo, p. Martin, c, h. & McAndrew, s. 2014. The Psychological Impact of Female Genital Mutilation/Cutting (FGM/C) On Girls/Women's Mental Health: A Narrative Literature Review. Journal of Reproduction and Infant Psychology. Volume 32.

Nieswiadomy, R, M. & Bailey, C. 2018. Foundation of Nursing Research. Seventh Edition. Pearson. Boston. USA.

Northcut, T, B. & Kienow, A. 2014. The Trauma Trifecta of Military Sexual Trauma. A Case study Illustrating the Integration of Mind and body in Clinical Work with survivors of MST. Clin Soc Work. Springer. New York.

Ostermann, M. & Vincent, J. 2019. How much centralization of critical care services in the era of telemedicine? Critical Care 23. BMC. Article no, 423.

Peterson, C. DeGue, S. Florence, C. & Lokey, C, N. 2017. Lifetime Economic Burden of Rape Among U.S. Adults. National library of Medicine. PubMed.

Polit, D, F. & Beck, C, T. 2004. Nursing Research: Principles and methods. Seventh Edition. Lippincott Williams & Wilkins. Philadelphia. USA.

Santos C, M, C. Pimenta C, A, M. & Nobre MRC. 2007. The PICO strategy for the research question construction and evidence search. Rev Latino-am Enfermagem. maio-junho.

Smith, P, G. Marrow, R, H. & Ross, D, A. 2015. Field Trials of Health Interventions: A Toolbox. 3rd edition. Oxford University press. United Kingdom.

Snyder, H. 2019. Literature review as a research methodology: An overview of guidelines. Journal of Business research. Oslo. Norway.

Stanley, N. & Devaney, J. 2017. Gender-Based Violence: Evidence from Europe. Psychology of Violence. Vol,7. No,3. P.329-332.

Thomas, D, R. & Hodges, I, D. 2010. Designing and Managing Your research Project: Core Knowledge for Social and Health Researches. SAGE. London.

Vandenbroucke, J, P. Elm, E, V. Altman, D, G. Gøtzsche, P, C. Mulrow, C, D. Pocock, S, J. Poole, C. Schlesselman, J, J. & Egger, M. 2007. Strengthening the Reporting of Observational studies in Epidemiology (STROBE). Explanation and Elaboration. STROBE Initiative. Lippincott Williams & Wilkins.

Walsh, K. Fortier, M, A & DiLillo, D. 2010. Adults coping with Childhood Sexual Abuse: A theoretical and Empirical View. Aggressive Violent Behaviour. National institute of Health.

Watts, C. Hossain, M. & Zimmerman, C. 2013. War and Sexual violence: Mental Health care for Survivors. The New England Journal of Medicine.

Wells, D.2017. Sexual Violence interventions: Considerations for humanitarian settings. Forensic science International. Australia.

Whittemore, R. & Knafl, K. 2005. The Integrative Review: Updated Methodology. Methodological Issues of Nursing Research. Blackwell publishing Ltd. USA.

World Health Organisation (WHO). 2003. Guidelines for Medico-Legal Care for Victims of Sexual Violence. Geneva. Switzerland.

Web searches:

Beijing Declaration and Platform for Action, 1995.
https://www.un.org/womenwatch/daw/beijing/pdf/BDPfA%20E.pdf Accessed 09.04.2019

National Women's Law Centre, 2017.
https://nwlc.org/wp-content/uploads/2017/04/Forcing-Students-to-Report-Sexual-Assault-to-the-Police-Makes-Them-Less-Safe.pdf Accessed 10.06.2020

World Health Organisation (WHO). 2018. Female genital mutilation
https://www.who.int/en/news-room/fact-sheets/detail/female-genital-mutilation Accessed 09.04.2019.

World Health Organisation (WHO). 2002. World Report on Violence and Health. Geneva. http://apps.who.int/iris/bitstream/handle/10665/42495/9241545615_eng.pdf;jsessionid=9885F6FC60682EB89E68B7B1C93559A3?sequence=1 Accessed 04.12.2018

Statistics Finland, 2018
https://www.stat.fi/til/rpk/2017/13/rpk_2017_13_2018-05-08_kat_001_en.html Accessed 03.12.2018

Statistics Finland, 2019
http://www.stat.fi/til/rpk/2018/04/rpk_2018_04_2019-01-17_tie_001_en.html Accessed 18.03.2019

Terveyden ja Hyvinvoinnin Laitos (THL), 2018.
https://thl.fi/en/ Accessed 09.04.2019

Terveyden ja Hyvinvoinnin Laitos (THL), 2020.
https://thl.fi/en/web/thlfi-en/services/special-government-services-in-social-welfare-and-health-care/shelters-for-victims-of-domestic-violence Accessed 28.05.2020.

Amnesty International, 2019.
https://www.amnesty.org/en/latest/news/2019/09/finland-international-body-condemns-outdated-definition-of-rape-as-amnesty-calls-for-rape-law-reform/ Accessed 10.02.2020.

American psychological association, 2020
https://www.apa.org/topics/ptsd/index.html Accessed 10.02.2020.

Centre for Disease Control and Prevention (CDC), 2020.
https://www.cdc.gov/violenceprevention/sexualviolence/index.html Accessed 11.05.2020

Info Finland, 2019
https://www.infofinland.fi/en/living-in-finland/problem-situations/violence Accessed 11.05.2020

Safe Line, 2020
https://www.safeline.org.uk/what-can-friends-and-family-members-do-to-support-survivors-of-sexual-abuse/ Accessed 28.05.2020

Figures

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Appendices

Appendix 1: Evidence table of the studies included in the literature review

Selected Studies	Study design and sample	Purpose and aim of the study	Country	Data and methods	Results	Quality appraisal
Peeters et.al. 2019. Current care for victims of sexual violence and future sexual assault care centres in Belgium: the perspective of victims.	A mixed-method design (questionnaire, in-depth interview, or small focus group). 16 rape victims participated. Majority of these participants originated from Belgium and a couple from Italy and Algeria.	To explore the perspective of victims of rape on the current sexual violence care provision in Belgium and investigate their need for more specialised and holistic care in future sexual assault care centres.	Belgium	The study was had a bifold method. 2 questionnaires to be filled at a month apart were handed to the first target group of victims over 16 years of age who had just had asexual aggression set between the period of research (May -November 2016). The second target group of former victims from the population were invited for an in-depth interview or small focus groups. The dual was analysed by descriptive thematic framework.	**Results:** The victims' perspectives on the current care in sexual assault care centres included importance that all victims should receive medical, psychological, and forensic care without involving the police. The also suggested some improvement in the current care toward patient centred and holistic approach while including victims' families or significant other. **Conclusion:** Victims approved the need of having an open 24/7 sexual assault centre for victims and their partners would greatly improve the current overall care for victims.	(45/45) =100%
Gilles et.al. 2019. Implementation of a protocol and staff educational sessions improves the care of survivors of sexual assault.	A historical cohort study. Charts of 362 female survivors of sexual violence were viewed.	To analyse the effectiveness of the implemented new protocol and educational sessions	Belgium	Computerized medical charts of 362 female survivors of sexual abuse above the age of 15 between 1 January 2010-31 December 2015	The main outcomes measured that 'optical medical care was characterized as systematic investigation of	(42/66) = 64%

		provided to workers at the CHU saint Pierre		were reviewed retrospectively. Descriptive statistics were used to analyse the study.	sexually transmitted diseases, pregnancy test, emergency contraception, psychological and medical follow-op, and provision of prophylactic antibiotics.	
Shahali et.al. 2019. Perceived social support and self-esteem in sexual violence victims.	A cross-sectional study. The participants included 66 women with history of sexual violence attending sexual violence groups and 147 women with no history of sexual violence.	To investigate the connection between self-esteem and perceived social support among sexual violence victims.	Iran	The study was conducted 2015 in forensic medical centres and all health centres connected to Shahid Beheshti University of Medical sciences of Tehran. Inclusion criteria were non pregnant women between the age of 15 -45, literate and of Iranian origin. Data was analysed using IBM SPSS statistical software.	The outcomes showed momentous difference between the groups in the level of perceived social support in all subscales and the non-sexual violence group ($p<0,001$) was higher. Findings also displayed a no difference in the level of self-esteem between both groups. A minor symbolic positive correlation between self-esteem level between perceived social support was noticed, giving statistics as ($r=0,274$, $p=0,026$). **Conclusions:** The study outcomes determined that female victims of sexual abuse had low social support from the circle in their lives, that is, family and friends. However, friends' support had a small positive impact on one's self-esteem.	56/66 = 85%
Masilo & Davhana-Maselesele. 2017. Guidelines for support to mothers of	A concurrent triangulation mixed method (qualitative	To develop guidelines that would assist stakeholders to	South Africa	Both qualitative and quantitative methods were used in two stages	**Results:** Participants revealed significant levels of	(30/45) = 67%

sexually abused children in north-west province.	and quantitative) design. 17 participants participated in the qualitative component well as 180 participants for the quantitative component.	offer support to mothers of sexually abused children in North-west province.		of the research. In stage 1: Participants were mothers between age 19 -70 years whose children had faced sexual abuse. In-depth unstructured interviews were conducted with 17 participants. Whereas in stage 2 which was a quantitative approach, participants (n=180) through the use of Raosoft sample size calculator.	depression among the due to lack of support from stakeholders. Based on literature review, guidelines for support to assist mothers with secondary trauma cope, were developed. **Conclusions:** Mothers or guardians of sexually abused children require a lot of support too and stake holders should contemplate on a positive approach towards it.	
Fong et.al. 2015. Caregiver perceptions about mental health services after child sexual abuse.	A Mixed –method study. Purposive sampling was used, and 22 non-offending caregivers of suspected child sexual abuse victims were selected. Majority of the participants were black/African American.	To describe the experiences of caregivers about mental services after child sexual abuse and explore factors that affected their children linked to services.	USA	A qualitative and quantitative method approach was used in this study between July 2013 -February 2014. Semi-structured interviews of care givers of suspected childhood sexual violence were conducted in the study. The audio-recorded interviews were transcribed, coded, and analysed using grounded theory. The included participants had (n=12) and had not(n=10) linked their children to mental health services. And 955 forensic interviews.	**Results:** Generally, caregivers disclosed that mental health services were vital for children after child sex abuse but had a few concerns about diverse child outcomes. For the caregivers who had not link their children to mental health service, believed it was not necessary and had concerns about mental health services re-traumatizing and stigmatizing the children. **Conclusions:** There is a need to increase mental health services linkage and increasing communication with	(44/45) = 98%

					caregivers about its benefits is crucial.	
Darnell et.al. 2015. Factors associated with the follow-up attendance among rape victims seen in acute medical care.	An observational study. Data of 521 victims of rape or suspected rape was included. Of which the race or ethnicity showed that majority were Caucasians (68%), African Americans (14%), native Americans (5%), Asians (4%), multiracial (4%), other ethnics (3%) and unreported (1%).	To explore factors associated with rape victim's attendance to the follow-up appointments among rape victims after the acute medical care.	USA	Organizational, patient self-report and provider observational data. The medical records of patients who sought acute services for rape from January 2011 to December 2012 in Harborview emergency department were reviewed retrospectively. The study focused on only data linked with the first rape for analysis. The dependent variable in the search was whether patients attended the proposed medical follow-up at Harborview centre for sexual abuse and traumatic stress. Were as the independent variables being patient sociodemographic traits, gender, race, disability status, parental status, and housing status.	**Results:** 521 diverse female(n=476) and male(n=45) rape victims were recorded. Of which 28% attended the endorsed medical / counselling follow-up appointment. Participants who had developmental or other disabilities, existing mental illness, and those with background of public assault were distinctively linked to decreased probabilities of attending follow-up. Whereas those with previous mental health disorder, a completed sexual assault nurse examiner's examination and available social support to cope with the trauma was linked to increased odds of attending follow-up. **Conclusions:** The study evidence points to the exceedingly essential extent of response to the problem of sexual harassment and rape which is at rampage both on campuses and in the military.	(66/66) 100%

Schönbucher et.al. 2014. Adolescent perspectives on social support received in the aftermath of sexual abuse: A qualitative study	A qualitative study. Sample: 26 adolescents participated from the general population. Twenty of the participants were swiss while four were non swiss nationality.	To investigate adolescent perspectives on social support received in the aftermath of sexual abuse.	Switzerland	Data collection was achieved through in-depth interviews. The recruitment inclusion criteria were set at age range of 15-18 years.	**Results:** The study's outcomes indicate that although participants anticipated parental support as the most crucial type of support, they were positively satisfied with the support from peers. **Conclusions:** Social support has been presented to be an important role in psychological recovery after sexual abuse but the scope and quality of it provided to young survivors should be adequately investigated.	(26/30) =87%
Puffer et.al. 2011.An evidence-based group coping intervention for women living with HIV and History of childhood sexual abuse.	A descriptive observational study. Clinical trial participants: 52 women with a history of childhood sexual abuse before the age of 18, HIV-positive and living in New York city.	To describe a coping skills group intervention that reduced traumatic stress and sexual risk behaviour.	USA	The recruited participants were community organizations in New York between 2002 – 2004. Data collected through observation and a structured interview included: demographics, sexual abuse history, depression, and posttraumatic stress. Eligibility requires to be HIV-positive and having experienced childhood sexual abuse before age 18.	The randomized clinical trial focused on clinical matters coming up among female participants receiving intervention. Observations demonstrated that the recognition of relationships between trauma, psychological distress, and high-risk behaviours, was a new and influential experience to the participants.	(59/63) =94%

					Conclusions: Participants conveyed high levels of satisfaction with the intervention.	
Wilson, D, R. 2010. Stress Management for Adult survivors of childhood sexual Abuse: A holistic Inquiry	An exploratory Mixed -method study. Participants included 35 adult survivors of childhood sexual abuse. Participants were from rural and sub-urban areas in south-eastern United states.	To examine the experience of stress management training for adult survivors of childhood sexual abuse.	USA	Thirty-five participants completed a 4 weeks stress management training. The inclusion criteria were above 18 years of age and a history of self-reported childhood sexual abuse. The gathered data for analysis included pre- and post-intervention saliva samples, ways of coping questionnaire, and a post intervention qualitative review. Grounded theory analysis was used.	**Results:** The study outcomes revealed that stress management strategies enhance immunity and coping with sexual violence trauma. The grounded theory analysis used in the study found three outstanding themes: hypervigilance, somatic detachment, and healing pathway. **Conclusion:** Healing is possible if stress management educational sessions are availed to survivors through co-ordinated support programmes, churches, and public education.	(45/45) =100%
Macy et.al, 2010.Domestic violence and sexual assault agency on services that help survivors.	An exploratory Qualitative research. Participants: 103 executive directors of domestic violence and sexual assault agencies in North California.	To investigate domestic violence and sexual assault agency director's opinions regarding what survivors are most helpful for survivors	USA	Data was collected through in-depth interviews of randomly selected executive directors (n=14) of different domestic and sexual assault agencies located in North California USA.	**Results:** The in-depth interviews of the study presented finding about: Vital service delivery practises, demanding services for survivors, optimal services that are challenging to deliver because of insufficient funds and other barriers, and hesi-	(26/30) =87%

					tation in some areas of service delivery due to the lack of best practices. **Conclusions:** The study displays that agencies of domestic and sexual assault in North California provide enormous services to survivors in their community even if they face some barriers in the deliverance.	

Appendix 2: Quality Appraisal using CASP Checklist (i) for qualitative studies.

Checklist items:	Schönbucher et.al. 2014	Macy et.al 2010.
Screening questions:		
Did the study address a clearly focused question?	xxx (3)	xxx (3)
Is qualitative method appropriate?	xx (2)	xxx (3)
IS IT WORTH CONTINUING?	**Yes**	**Yes**
Applied detailed questions:		
Were the aims of the research appropriate to address the research approach?	xxx (3)	xxx (3)
Were the aims of the research appropriate to the recruitment strategy?	xx (2)	xxx (3)
Was the research issue addressed in the data collection?	xxx (3)	xxx (3)
Was the relationship between the researcher and the participants been sufficiently considered?	xxx (3)	xx (2)
Have ethical issues been taken into consideration?	xxx (3)	xxx (3)
Was the data analysis adequately thorough?	xx (2)	x (1)
Is there a clear statement of the findings?	xxx (3)	xxx (3)
How valuable is the research?	xx (2)	xx (2)
Scores:	(26/30) =87%	(26/30) =87%

Score scale:

xxx-> assessment measure fulfilled.

xx-> assessment measure moderately fulfilled.

0-> assessment measure not fulfilled.

N/A- assessment measures do not apply

Appendix 3: Quality Appraisal using MMAT Checklist (ii) for mixed studies.

References	Screening questions		Is further appraisal appropriate?	1. Qualitative	2. Qualitative randomized controlled trials	3. Quantitative non-randomised	4.Quantitative descriptive	5. Mixed methods	Scores
	S1	S2							
Fong et.al. 2015	xxx	xxx	Yes	1.1: xxx 1.2: xxx 1.3: xxx 1.4: xxx 1.5: xxx	N/A	3.1: xxx 3.2: xxx 3.3: xx 3.4: xxx 3.5: xxx	N/A	5.1 xxx 5.2: xxx 5.3: xxx 5.4: xxx 5.5: xxx	(44/45) = 98%
Peeters et. al. 2019	xxx	xxx	Yes	1.1: xxx 1.2: xxx 1.3: xxx 1.4: xxx 1.5: xxx	N/A	N/A	4.1: xxx 4.2: xxx 4.3: xxx 4.4: xxx 4.5: xxx	5.1 xxx 5.2: xxx 5.3: xxx 5.4: xxx 5.5: xxx	(45/45) =100%
Masilo & Davhana-Mase-lesele. 2017	xxx	xxx	Yes	1.1: xxx 1.2: xxx 1.3: xxx 1.4: xx 1.5: 0	N/A	3.1: xxx 3.2: xx 3.3: 0 3.4: xxx 3.5: xxx	N/A	5.1 0 5.2: xxx 5.3: xxx 5.4: 0 5.5: xx	(30/45) = 67%

Wilson. 2010	xxx	xxx	Yes	1.1: xxx 1.2: xxx 1.3: xxx 1.4: xxx 1.5: xxx	N/A	3.1: xxx 3.2: xxx 3.3: xxx 3.4: xxx 3.5: xxx		5.1 xxx 5.2: xxx 5.3: xxx 5.4: xxx 5.5: xxx	(45/45) =100%

Checklist questions:

Screening questions:

S1. Are research questions clear?

S2. Does collected data allow to address the research questions?

1. Qualitative method questions:

1.1 Appropriate qualitative approach to answer the research question

1.2 Adequate qualitative data collection methods to address the research question

1.3 Findings adequately derived from the data

1.4 Interpretation of results sufficiently substantiated by data

1.5 Coherence between qualitative data sources, collection, analysis, and interpretation

2.Qualitative randomized controlled trials questions:

2.1 Appropriate randomization performed

2.2 Groups comparable at baselined

2.3 Outcome data completed

2.4 Outcome assessors blinded to the intervention provided

2.5 Participants adherence to the assigned intervention

3. Quantitative non-randomised questions:

3.1 Participants of the target population represented

3.2 Appropriate measurements regarding both the outcome and intervention

3.3 Outcome data completed

3.4 Confounders in the design and analysis accounted for.

3.5 Intervention administered during the study period as intended

4.Quantitative descriptive questions:

4.1 Strategy of sampling relevant to address the research question

4.2 Sample representative of the target population

4.3 Appropriate measurements

4.4 Low risk of nonresponse bias

4.5 Appropriate statistical analysis to answer the research question

5.Mixed methods questions:

5.1 An adequate rationale for using a mixed method design to address the research question

5.2 Different components of the study effectively integrated to answer the research question

5.3 Outputs of the integration of qualitative and quantitative components adequately interpreted

5.4 Divergences and inconsistencies between quantitative and qualitative results adequately addressed

5.5 Different components of the study adhere to the quality criteria of each tradition of the methods involved

Score scale:

xxx-> assessment measure fulfilled,

xx-> assessment measure moderately fulfilled,

0-> assessment measure not fulfilled,

N/A- assessment measures do not apply

Appendix 4: STROBE checklist for observational studies. (iii)

Checklist of items:	Gilles et al. 2019	Shahali et al. 2019	Darnell et al. 2015	Puffer et al. 2011
1. Is the title and abstract well defined?	xxx (3)	xxx (3)	xxx (3)	xxx (3)
2. Is the scientific background and rationale explained?	**xx (2)**	xxx (3)	xxx (3)	xxx (3)
3. Are specific objectives stated?	**xx (2)**	xxx (3)	xxx (3)	**xx (2)**
4. Presentation of the study design key elements	**xx (2)**	xxx (3)	xxx (3)	xxx (3)
5. Description of the study settings	xxx (3)	xxx (3)	xxx (3)	xxx (3)
6. Presentation of eligibility criteria for participants	xxx (3)	xxx (3)	xxx (3)	xxx (3)
7. Clear definition of variables	xxx (3)	**xx (2)**	xxx (3)	xxx (3)
8. Description of data sources/measurements	xxx (3)	xxx (3)	xxx (3)	xxx (3)
9. Is potential sources of bias defined?	0	0	xxx (3)	0
10. Explanation of how the study size was arrived at	xxx (3)	xxx (3)	xxx (3)	xxx (3)
11. Explanation of how quantitative variables were handled.	xxx (3)	xxx (3)	xxx (3)	N/A
12. A description of statistical methods	xxx (3)	**xx (2)**	xxx (3)	**xx (2)**
13. Report and explanation of numbers of the participants per stage	xxx (3)	xxx (3)	xxx (3)	xxx (3)
14. Presentation of descriptive data.	**xx (2)**	xxx (3)	xxx (3)	**xx (2)**
15. Reported numbers of outcome data.	xxx (3)	xxx (3)	xxx (3)	xxx (3)
16. Are the main results reported?	xxx (3)	xxx (3)	xxx (3)	xxx (3)
17. Are reports on other analyses done?	**xx (2)**	0	xxx (3)	xxx (3)
18. Summary of the key results with reference to study objectives.	**xx (2)**	xxx (3)	xxx (3)	xxx (3)
19. Discussion of limitations of the study.	xxx (3)	xxx (3)	xxx (3)	xxx (3)
20. Is the interpretation of results presented?	xxx (3)	xxx (3)	xxx (3)	xxx (3)
21. Discussion of the generalisability of the study results	**xx (2)**	**xx (2)**	xxx (3)	xxx (3)
22. Presentation of source of funding and role of funders	xxx (3)	**xx (2)**	xxx (3)	**xx (2)**

Score	42/66 (64%)	56/66 (85%)	66/66 (100%)	59/63 (94%)

Score scale:

xxx-> assessment measure fulfilled

xx-> assessment measure moderately fulfilled

0-> assessment measure not fulfilled

N/A- assessment measures do not apply