Mental Health of Human Trafficking: A Systematic Review

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Abstract Human trafficking is being global crime worldwide. The practice of human trafficking in the form of human exploitation implicated in human rights violations. Survivors of human trafficking will experience health problems both physical and mental problems. The purpose of this systematic review was to identify and summarize the mental health problems of human trafficking victims. Systematic search conducted on March 12, 2019 in data of ProQuest, SpringerLink, and Scopus by keyword *human health of human trafficking* between the years of 2013-2018. The result of this search found 14 journals that match with inclusion criteria. The inclusion criteria were peer-reviewed journal articles, written in English, all forms of exploitation, the samples are aged >15 years old. The results shown the incidence of human trafficking greatly affected the mental health of victim. Victims experienced anxiety, depression, isolation, disorientation, aggression, suicidal ideation, attention deficit, psychotic disorders, behavioral and post-traumatic stress disorder (PTSD). For further research required in efforts to overcome the mental health impact of human trafficking victims. The focus on preventing efforts was through government campaigns, IOM and law enforcement and also the fulfillment of the rights of human trafficking victims.

Introduction Human trafficking is not a new problem in the world as a global phenomenon which has implications for the health and human rights (Iglesias-rios, Harlow, Burgard, Kiss, & Zimmerman, 2018). Human trafficking is modern form of slavery in which the perpetrators of financial gain through the exploitation of the victim. UN issues protocol to prevent, suppress and punish trafficking in persons especially women and children (Iglesias-rios et al., 2018). Forms of exploitation by perpetrators of trafficking (Oram, Khondoker, Abas, Broadbent, & Howard, 2015) are violence, fraud, coercion to make money from victims through employment or commercial sex workers (Brace, Sanders, Oommen, & Brace, 2018). The process of human trafficking involving an individual, family, and local network criminal/Supra-regional organized. An estimated 45.8 million people in the world of human trafficking (Elizabeth K. Hopper, 2016). Developing country area such as ASEAN evolved as vulnerable to human trafficking because of difficulties in finding a job (Kiling-Bunga, 2019). Including Indonesia, which has a lot of people so a lot of work needs to increase. IOM noted Indonesia including the 13 countries with the highest number of cases handled (Kiling-Bunga, 2019). Trafficking problem has occurred for a long time despite the efforts of the government, local and international organizations (Gezie, Yalew, Gete, Azale, & Brand, 2018).

During the process of human trafficking, victims usually being abused physically, sexually, psychologically by the perpetrators. Victims also have many accidents or violence during the trip, getting certain diseases and
women victims may experience an unwanted pregnancy or unsafe sexual practices. In fact, they experience social exclusion and financial and labor exploitation (Cary, Oram, Howard, Trevillion, & Byford, 2016). Victim susceptible to a variety of crimes. It varies depending on socio-demographic characteristics and exposure to the treatment received (time spent during the trade, this kind of exploitation, the level of restriction of liberty and the number of hours worked) (Gezie et al., 2018). Victims are limitations in his life including basic water needs. exploitation implications negative on health that makes the victim isolated from society (Rafferty, 2018). In fact, the victim vulnerable to physical illness acute/chronic and mental health disorders (Iglesias-rios et al., 2018). The victim very likely to experience anxiety, depression and PTSD. Exposure related socio-economic factors influencing trade into mental health (Gezie et al., 2018). Mental disorders are continuing according to the condition of victims plus predisposing factors aggravate the situation (Abas et al., 2013) such as differences in experiences of violence on female victims and male. The prevalence of anxiety, depression, and PTSD in women victims higher than male victims (Iglesias-rios et al., 2018). Based on the description above, the systematic review and summarize it wants to identify mental health issues to the victims of human trafficking.

Materials and methods

Search criteria

Systematic search using electronic search with NHS evidence (electronic information resources, research, evidence, and best review). Searches were conducted on March 12, 2019, with electronic database searches on ProQuest, SpringerLink, and Scopus. Health care data bases have been because it allows advanced search of relevant articles. Secondary search with manual scanning through reference to the relevant article. Keywords grouped into two areas: Characteristics of psychosocial and mental health trade. Keywords represent concepts that were directly related to trade issues, including socio-demographic, economic, violence, depression, anxiety, PTSD, and suicide on trafficking victims.

Inclusion and Exclusion Criteria

The inclusion criteria were peer-reviewed journals in English by year of publication between 2013 to 2018. Selected articles varied in various forms of exploitation such as sexual abuse, violence, selling of organs. Selected samples were survivors who were 15 years old to adult. Articles that were not included in this paper were Dissertations and Theses (ProQuest), the Conference of COS, ProQuest Index, Conference Proceedings, Citation Index (Thomson Reuters), Thesis and Dissertation website Open Access, Open Grey, and report the results.

Selection of Studies and Data Extraction

According to 14 studies selected, then extracted type of study, subjects and sources of research data. Researcher also extracted an article discussing mental health and psychosocial characteristics of human trafficking. Discussion of the differences in the results of research required consideration of the author.
Results and discussions

Process of Taking and Abstracting Journal

Figure 1. The initial search was obtained 61,419 articles that consisted of 31,900 of ProQuest, 29,277 of SpringerLink and 242 of Scopus. 19,308 articles removed because it did not fit the inclusion criteria. The review process was selected based on reviews of article titles, abstracts and full text. Researcher extracted 61 studies of the titles and abstracts and 47 studies of full-text review. Finally, 14 articles selected for this study.

Outcomes Measures

Summary of Characteristics
The search yielded 14 articles. Six articles using qualitative design, three articles using quantitative designs: cross-sectional and RnD, five articles using cohort study. Total of 455,392 participants consisting of 5,248 direct participants and 450,144 tracked from electronic medical records and database of CRIS.

Characteristics Participants
Characteristics of participants in 14 studies were described as follows: characteristics of study participants in Ethiopia were male and female under the age of 18 years old (Gezie et al., 2018). Cambodia, Thailand, Vietnamese were male, female, adolescents and children aged 10-17 years (Iglesias-rios et al., 2018; Aberdein & Zimmerman, 2015), Moldova special for female aged >18 years (Abas et al., 2013), Ghana special for girls and female without mentioning age (Okech et al., 2018), US to keep track of medical records of patients <18 years (Moore, Houck, Hirway, Barron, & Goldberg, 2017). South London and East London in search of medical records of children and women up to 30 years (Cary et al., 2016; Oram et al., 2015) India, Laos, Nepal without specifying gender and age, East Nusa Tenggara for women aged 21-37 years (Kiling-Bunga, 2019) and the rest did not mention the place, age, or gender of the participants (Rafferty, 2018).

Context
The research data was collected in 2006–2012 (Cary et al., 2016), 2006-2012 (Okech et al., 2018), 2014 (Rafferty, 2018; Ottisova, Smith, Shetty, Stahl, & Downs, 2018), 2006-2012 (Domoney, Howard, Abas, Broadbent, & Oram, 2015), 2016 (Gezie et al., 2018). Four were taken using electronic medical records and databases CRIS years 2007-2012 (Aberdein & Zimmerman, 2015); (Cary et al., 2016); (Oram et al., 2015); (Rafferty, 2018).
Recruitment and sampling

The sampling methods on 14 studies were differentiated by design research undertaken. In quantitative research using consecutive sampling, and cohort was used while using a qualitative research study of medical records in accordance with the criteria of the UN Protocol and purposive sampling. Four studies with a cohort design was conducted by checking the electronic medical record or database CRIS at hospital. 10 studies took the sample directly in places where human trafficking occurred. In-dept qualitative data collection through interviews with open-ended questions in person or over the phone. While quantitative questionnaire or implement interventions to participants.

Study design and analysis

Article qualitative used semi-structured interviews in a special group. Three articles used quantitative questionnaire design and five articles using a cohort study with Electronic Medical Record or database CRIS (Cary et al., 2016; Moore et al., 2017; Oram et al., 2015). Two studies using logistic regression analysis (Abas et al., 2013; Oram et al., 2015). Two studies using SEM (Gezie et al., 2018; Iglesias-rios et al., 2018), one study using multiple regression (Cary et al., 2016), one study using descriptive analysis (Moore et al., 2017), five studies using thematic analysis (Aberdein & Zimmerman, 2015; Brace et al., 2018; Domoney et al., 2015; Kiling-Bunga, 2019; Ottisova et al., 2018) and three studies using retrospective interviews with UN standard protocol. Among the studies did not found that reported the normality assumption test and data.

Ethical considerations

There were 13 studies reported ethical approval to use ethical standards of WHO and Recommendations Safety (Iglesias-rios et al., 2018). Ethical approval was obtained from Kings College Research Ethics Committee (CREC/07/08-56) and from the State of N. Testemitanu Institutional Review Board of the Medical and Pharmaceutical University (Gezie et al., 2018), Research Ethics Committee (Oxfordshire C., reference 08/H0606/71) (Brace et al., 2018; Elizabeth K. Hopper, 2016) and Ethical approval from the University of South Wales (Kiling-Bunga, 2019). One study did not report on the ethical approval.

Table 1. Summary of Outcomes Measure

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<tr>
<th>No</th>
<th>Title, Author, Year</th>
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<tbody>
<tr>
<td>1</td>
<td>Socio-economic, human trafficking exposure and mental health symptoms returning trafficking victims in Ethiopia (Gezie et al., 2018)</td>
<td>Population: victims of trafficking survivors (May-October 2016). Samples were 1387 victims of trafficking through three corridors in Ethiopia.</td>
<td>Socio-economic variables, exposure to human trafficking. Anxiety was measured with generalized anxiety disorder (GAD-7), depression was measured with the patient health questionnaire (PHQ-9), and PTSD with post-traumatic checklist (PCL-C).</td>
<td>Survivors with mental health problems are anxiety, depression and PTSD. Exposure socio-economic and trade mediated by violence affects the mental health symptoms.</td>
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Suwetty et al. Mental Health of Human Trafficking

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<td>2</td>
<td>Mental health, violence and psychological female and male survivors of trafficking in the Mekong region (Iglesias-rios et al., 2018)</td>
<td>Cross-sectional</td>
<td>Samples were 1,015 female and male survivors (adults, adolescents, children) in various labor sectors that receive the service with the aftermath of trafficking in Cambodia, Thailand, Vietnam.</td>
<td>Assessment of anxiety and depression with Hopkins Symptom Checklist (HSCL-25), PTSD by a combination of the Harvard Trauma Questionnaire (HTQ) and the World Health Organization’s International Study on Women’s Health and Domestic Violence.</td>
<td>Symptoms of anxiety, PTSD and depression in women with physical and sexual violence is higher than in men who have experienced violence with weapons.</td>
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<td>3</td>
<td>The risk factors of mental disorders in women survivors of trafficking; History (Abas et al., 2013)</td>
<td>Cohort</td>
<td>2,340 samples of women, survivors of trafficking back to Moldova.</td>
<td>Structured Clinical interview according to DSM-IV (SCID).</td>
<td>An average of 6 months post-trafficking, found problems such 35.8% PTSD (alone or together), 12.5% depression without PTSD 5.8% other anxiety disorders. Child sexual abuse increased in the aftermath of trafficking, trafficking resulting in the length of time experiencing mental disorders.</td>
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<td>4</td>
<td>Social Support, Coping Dysfunctional and Community Reintegration as Predictors of PTSD in victims of trafficking (Okech et al., 2018)</td>
<td>Structural equation modeling was used to assess the conditional process model.</td>
<td>Samples 144 Women</td>
<td>Psychosocial interventions that Lifeline program-based Rescue, Rehabilitation, Reintegration. PTSD Symptom Scale version Interview (PSS-I) with 28 items which to measure situational prevention and disposition of people. Multidimensional Scale Perceived Social Support (MSPSS) is to measure the perception of support.</td>
<td>Anxiety, depression, alienation, disorientation, aggression, suicidal ideation, attention deficits, PTSD, dysfunctional coping found on the victims of trafficking.</td>
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<td>5</td>
<td>Trading experience And Psychosocial victims of sexual exploitation (Moore et al., 2017)</td>
<td>Cohorts</td>
<td>Sample: 25 medical records of patients aged &lt;18 who are involved in DMST begin on 1 August 2013-30 November 2015.</td>
<td>Patient demographics The experience of human trafficking (i.e., The relationship with the traffickers, methods of recruitment),</td>
<td>The majority of patients were women, The average age was 15.4 years. Psychosocial characteristics, history of runaway behavior,</td>
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<td>6</td>
<td>The economic analysis of human trafficking victims and mental disorders in the use of psychiatric services (Cary et al., 2016)</td>
<td>Cohort</td>
<td>119 patients South London and Maudsley NHS Trust (SLAM) database.</td>
<td>Calculate the total cost of the required number of trafficked by the transfer of available resources and then analyzed using a regression.</td>
<td>The majority of women, 2/3 trafficked for sexual exploitation. The average age at first contact with the service Slam is 22 years old. The majority of non-psychotic disorders diagnosed.</td>
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<td>7</td>
<td>Access to mental health and psychosocial services in Cambodia by survivors of trafficking and exploitation: a qualitative study (Aberdeen &amp; Zimmerman, 2015)</td>
<td>purposive sampling</td>
<td>Overview descriptive data about client seven mental health services organization after trafficking.</td>
<td>17 women and 37 men suffering from severe mental disorders Organizations that extracted the age of just 2.18%. 84% of clients &lt;30 years. Availability: Errors and social stigma.</td>
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<td>8</td>
<td>Characteristics of adults and children who are trafficked with severe mental illness (Oram et al., 2015)</td>
<td>Cohort</td>
<td>South London, England, January 1, 2006-31 July, 2012 with &gt;200,000 patients from CRIS.</td>
<td>Appropriate data extraction sociodemographic The data were processed using logistic regression to compare patients who traded and non-traded.</td>
<td>133 patients are traded including 37 children - children with the results: 78 of 96 were adults (81%) and 25 of 37 children (68%) were women. 51% of children are trafficked for sexual exploitation. Diagnosis majority is PTSD, stress, adjustment disorders and affective disorders The most common mental disorder is a mood disorder, PTSD, stress, and adjustment.</td>
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<td>9</td>
<td>Trauma-Informed Psychological Assessment of Human Trafficking Survivors (Elizabeth K. Hopper, 2016)</td>
<td>Identifying the core content areas of trade evaluation and adaptation process underlines the standard in assessment.</td>
<td>Women and girls who have been trafficked.</td>
<td>Trauma Center at Justice Resource Institute, a provider of mental health services for survivors of human trafficking in the United States.</td>
<td>Interpersonal traumatic stress affects the physical, emotional, and social. Depression, anxiety, and PTSD generally on survivors.</td>
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<td>10</td>
<td>Mental Health Services as a Vital Component for psychosocial recovery of children victims of trafficking are sexually exploited commercially (Rafferty, 2018)</td>
<td>213 victims from six countries.</td>
<td>Interview focused on the identification of victims, the need for services, intake and assessment procedures, temporary and psychosocial support, ongoing maintenance and (re) integration. Psychosocial Assessment Tool.</td>
<td>Depression (i.e., Feeling unhappy, sleep problems), posttraumatic symptoms (i.e., flashback as rape, feeling confused, angry or afraid), embarrassed.</td>
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<td>11</td>
<td>Access to Health Care for Victims of human trafficking focuses on three health agencies (Brace et al., 2018)</td>
<td>Samples 6-8 participants from the three sector health agencies around the K &amp; V.</td>
<td>Deep interview</td>
<td>Obtained four themes: Calls for improving access to care for mental illness. Increased knowledge and training of all health professionals. Working to support navigation two processes empowering individuals to identify themselves.</td>
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<td>12</td>
<td>Motive, Psychological Impact and Support for Victims of Human trafficking in NTT (Kiling-Bunga, 2019)</td>
<td>Participants five victims aged between 21-37 years who had returned to NTT</td>
<td>Interviews and observations</td>
<td>Participants are motivated to work outside of NTT for economic reasons, family, and social, some participants were also forced to work abroad. The psychological impact is maladaptive behavior, grief, helplessness, embarrassed by the stigma associated with victims of trafficking.</td>
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<tr>
<td>13</td>
<td>Responses mental health services to victims of human trafficking; qualitative study of professional experience in providing care (Domoney et al., 2015)</td>
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<td>14</td>
<td>The psychological consequences of child victims of trafficking (Ottisova et al., 2018)</td>
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**Participants**
- Samples were 130 victims, with 95 adults
- Sample: >250,000 medical records

**Intervention**
- Data provided by the institutions in South London and Maudsley NHS Foundation Trust (SLAM), search case Biomedical Research Center (BRC) Interactive (CRIS) database in Southeast London, England.
- Data was extracted by socio-demographic and relevant clinical characteristics, history of abuse, and trading experience

**Outcomes**
- 43% (41/95) of adult victims and 63% (22/35) of child victims, disclosure of relevant patient experience of exploitation and abuse against them. The main challenge of health workers is legal and social instability, difficulty ensuring a history, lack of patient involvement, availability of inter-agency services to help victims.
- 51 children are trafficked 78% of girls. The dominant diagnosis is PTSD (22%) and affective disorders (22%). high prevalence of physical violence (53%) and sexual violence (49%).

**Mains Findings**
The main mental health problems in trafficking victims were: Anxiety, Depression, PTSD.

1. Anxiety was measured by a questionnaire GAD-7 and the Hopkins Symptom Checklist-25. Cronbach alpha reliability coefficient estimated 0.914. The prevalence of anxiety symptoms.

2. Estimated 51% (Gezie et al., 2018), (Iglesias-rios et al., 2018). To assess DSM-IV mental disorders used the Structured Clinical Interview DSM-IV (SCID). 54% met criteria for DSM-IV mental disorders: PTSD, depression without PTSD and anxiety disorders (Oram et al., 2015).

3. Depression was measured with the patient health questionnaire (PHQ-9). Cronbach value on reliability test 0.928 (Iglesias-rios et al., 2018). The level of depression was 58.3% of trafficking victims (Gezie et al., 2018).

4. PTSD was measured with post-traumatic checklist (PCL-C) (Gezie et al., 2018). PTSD symptoms in the last week measured using Trauma Questionnaire (HTQ) from Harvard with 27 symptoms of trauma. HTQ has a high reliability and internal consistency and test-retest reliability ranging from 0.89 to 0.92 (Iglesias-rios et al., 2018). The result of the severity of interference on a scale of 4 and reliability Cronbach 0.94 and for PCL-C PTSD scale of 0.960.

5. Effective disruption, stress, and adjustment disorders

6. The clinical outcomes were investigated using the Global Assessment Scale scores Children (CGAS) for 1 month (Oram et al., 2015). As a result, the dominant clinical
diagnosis in children is PTSD, mood disorders and adjustment disorders. 10 children had non-specific diagnoses including other mental disorders and emotional disorders undetermined.

7. Dysfunctional coping

8. 12 of 28 items that measured coping or dysfunctional avoidant coping. The items rated on a scale of 1 “Do not ever do this at all” to 4 “I've done this.” Short cope scale reliability coefficient was 0.95 Cronbach (Okech et al., 2018) meaning that the victim has no interruption at dysfunctional coping.

9. Psychotic disorders

10. Victims had the psychological pressure but no formal diagnosis (Cary et al., 2016) Psychological Impact experienced was maladaptive behavior, sadness, helplessness, and shame by stigma (Kiling-Bunga, 2019).

Survivors of human trafficking would experience variety of mental health problems, namely anxiety, depression, and PTSD. Exposure of socio-economic and other factors also affected mental health symptoms (Gezie et al., 2018). The strategies management such as awareness raising training victims, encouraging responses were helpful, and had outlined a range of support for the mental health needs of victims.

Social support greatly affected the occurrence of PTSD. The victim reported the difficulty to return the society thus requiring mental health services assistance for recovery (Okech et al., 2018). Mental health services required a long time and support welfare through significant financial resources, so it needs the local government policy (Cary et al., 2016)

Prevention efforts that could be made by governments, NGOs and community organizations that promoted prevention programs (socialization and increased economic capacity of rural communities), took advantage of the family as the starting point of prevention for the family as a protective factor, strengthen the environment such as Environmental Unit and Unit Community as a radar to detect potential trafficking in persons, law and anti-trafficking legislation to strengthen the defense, especially in terms of labor recruitment and distributors, as well as ensuring that law enforcement has a strong legal basis (Rafferty, 2018), In addition to prevention, psychological intervention is also needed to help survivors adapt to their environment after a bad experience that happened, in order to return to society without shame (Kiling-Bunga, 2019).

Conclusion

Victims were likely to develop mental health problems, namely anxiety, depression, and PTSD. Socio-demographic factors (gender, wealth index, social support) and variable exposure (long suffered from human trafficking, freedom is limited, and a history of incarceration) mediated violence (physical, sexual) was a causative factor of mental health disorders. In addition to the economic reintegration of victims, training to raise awareness, encourage responses that are useful, and help meet the needs of victims are also required. Further research on efforts to overcome the causes and prevention of human trafficking should be conducted through the campaign of government, IOM and law enforcement as well as the fulfillment of the rights of victims of human trafficking.

Acknowledgements

Thank you for Region Police in East Nusa Tenggara, Police Resort In TTS, Maranatha Foundation have contribution in this research.

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