



REVISIONES

Vulnerable populations' coping in facing challenges during the covid-19 pandemic: a systematic review

Las poblaciones vulnerables enfrentando los desafíos durante la pandemia del covid-19: una revisión sistemática

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ABSTRACT:

Primary Goal: During the pandemic, the application of social distancing resulting in vulnerable populations becoming one of the groups experiencing the worst impacts, especially those who are children, pregnant women, and older adults. The purpose of this study is to analyze the obstacles encountered by these vulnerable populations.

Methods: This study uses a literature search method on several databases, namely CINAHL, Proquest, Wiley, and ScienceDirect, in the 2015–2020 period.

Results: The search resulted in 17 articles. The critical review carried out followed the Critical Appraisal Skills Program guidelines from Cochrane. This study's results were pandemic conditions that occur over a long period can affect vulnerable populations in society, consisting of children, pregnant women, and older adults. Vulnerable people have various coping mechanisms and are significantly affected by the presence or absence of social support from family, community, and the Government.

Conclusions: The importance of the Government's role in paying attention to the quality of specific health services for vulnerable populations can improve these populations' welfare and health status.

Key words: coping, COVID-19, pandemic, vulnerable populations.

RESUMEN:

Objetivo: Durante la pandemia, la aplicación del distanciamiento social determina que las poblaciones vulnerables se conviertan en uno de los grupos que experimentan los peores impactos, especialmente niños, mujeres embarazadas y adultos mayores. El propósito de este estudio es analizar los obstáculos que experimentan las poblaciones vulnerables.

Método: Este estudio utiliza un método de búsqueda de literatura en varias bases de datos como CINAHL, Proquest, Wiley, ScienceDirect de 2015-2020.

Resultados: Los resultados de la búsqueda obtuvieron 17 artículos. La revisión crítica que se llevó a cabo siguió las directrices del Programa de Habilidades de Evaluación Crítica (CASP) de Cochrane. Los resultados de este estudio fueron las condiciones pandémicas que ocurren durante un largo período y pueden afectar a poblaciones vulnerables de la sociedad, que consisten en niños, mujeres embarazadas y adultos mayores. Las poblaciones vulnerables tienen varios mecanismos de supervivencia y están significativamente influenciadas por la presencia o ausencia de apoyo social de la familia, la comunidad y el gobierno.

Conclusiones: La importancia del papel del gobierno en prestar atención a la calidad de los servicios especiales de salud para poblaciones vulnerables puede mejorar el bienestar y el estado de salud de estas poblaciones.

Palabras clave: afrontamiento, COVID-19, pandemia, poblaciones vulnerables.

INTRODUCTION

COVID-19 affects 216 countries, causing 17,660,523 confirmed cases and 680,894 deaths in the world during 2020⁽¹⁾. Indonesia latest infographic data showed the number of COVID-19 sufferers in mid-September 2020 reached 320,564 cases with a death toll of 11,580 people⁽²⁾. The government has made various efforts, including examining and treating the sufferers, running various health promotions related to transmission prevention. The encouraged preventions are good practice for handwashing, personal protective equipment, regional quarantine (lock-down) policies, and large-scale social restrictions^(3,4). The impact of COVID-19 has affected people's lives, various sectors of the country's development, and the global economy^(4,5).

The New Habit Adaptation policy progresses, with continuous evaluation of the COVID-19 reproductive rate and its impact on all society levels. The aggregates that focus on this pandemic are vulnerable populations encompassing health and social-economic conditions⁽⁶⁾. Pandemic and disaster conditions generally have a significant impact on people's lives, especially those who fall into the vulnerable populations. Vulnerable populations are groups of people who experience difficulties or inability to anticipate and carry out the recovery process when affected by a disaster. Those in vulnerable communities are older adults, individuals with non-communicable diseases, children, and pregnant women⁽⁷⁾.

The number of new cases is escalating to date in Indonesia. The Ministry of Health of the Republic of Indonesia released that the number of confirmed cases increases by 3000 cases every day in 2020. The increasing number of COVID-19 cases has led the Government to develop several guidelines for handling and prevention, especially for the vulnerable groups. The available procedures include for (a) pregnant women, post-partum mothers, and low birth weight during social distancing, (b) for mental and psycho-social health support, (c) for toddlers health services, (d) for the protection of older persons with a gender perspective during the COVID-19 period.

A survey of 6,854 respondents regarding COVID-19 showed that only 2% of them stated that they were diagnosed, and 6% indicated that they knew someone was infected. Younger respondents have a distrust of COVID-19. Coping carried out by individuals against the corresponding stress syndrome during independent isolation includes watching TV or movies, cleaning the house, maintaining communication with other people, and thinking that isolation is essential to help the community⁽⁸⁾. During the pandemic, all changes require data collection on risk factors to reduce the severity of this particular disaster to face a new life as soon as possible⁽⁹⁾. In other words, the

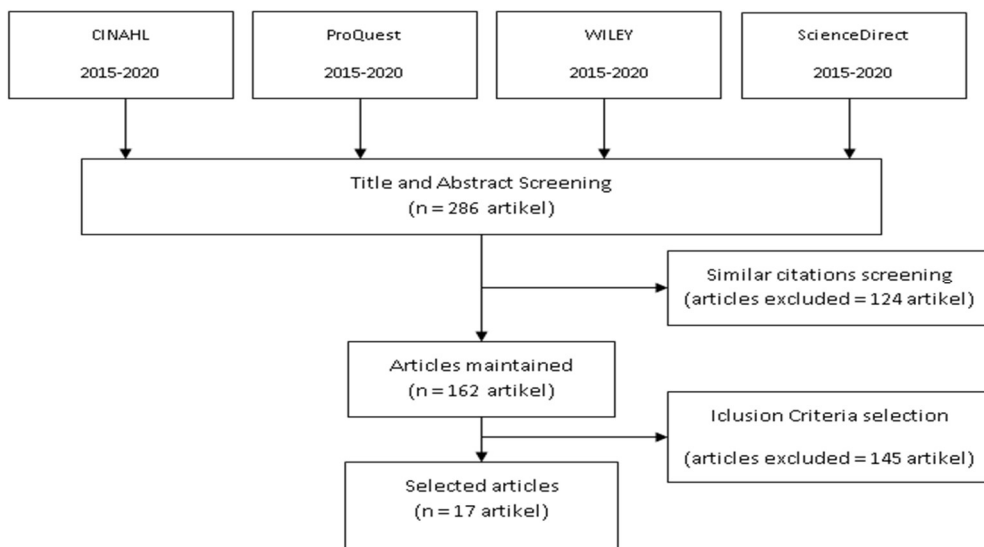
community must be able to adapt and to have good coping. The concept of adaptation assumes that someone is an open system influenced by internal and external stimuli. Environmental stimuli comprises of focal, contextual, and residual⁽¹⁰⁾. Roy's adaptation model is an effective method of controlling physical and psychological problems and getting someone to adapt to the stimulus they received⁽¹¹⁾.

The purpose of this paper is to analyze the obstacles experienced by the vulnerable populations so that some efforts can remove the barriers as a form of coping with them. These findings would be an input for the vulnerable people in adapting to obstacles during a pandemic.

METHODS

This study uses a literature search method on several databases, namely CINAHL, Proquest, Wiley, ScienceDirect using keywords: "pandemic", "children", "pregnant women", "older adults", "vulnerable populations", and "coping" from 2015–2020. The results were 1277 articles that match the keywords, screened the twin citation, and resulted in 286 articles. Exclusion and inclusion criteria were applied, remaining 17 articles. Figure 1 illustrates the process of searching and screening articles. The inclusion criteria include (a) English-language articles, (b) the 2015–2020 publication period, (c) study design RCT, meta-analysis, cohorts, surveys, case reports, and (d) articles on coping with the vulnerable populations during a pandemic.

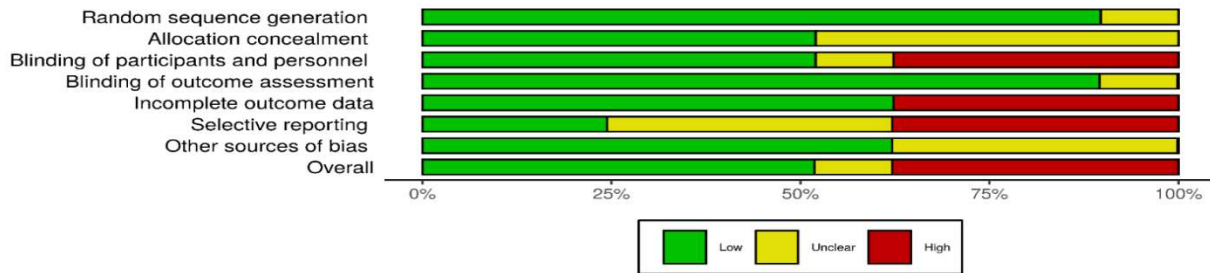
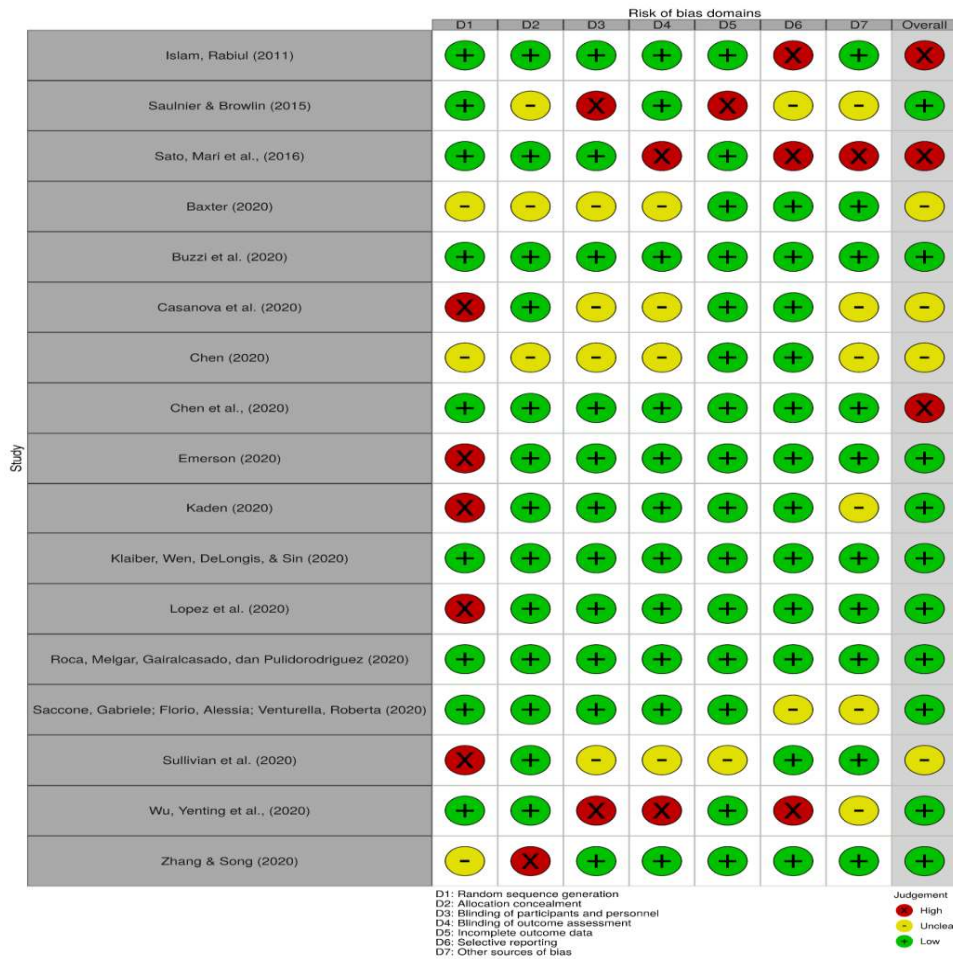
Figure 1. The PRISMA diagram in obtaining the relevant articles



RESULT

The critical review followed the Critical Appraisal Skills Program (CASP) guidelines from Cochrane; 17 selected articles were analyzed using the RobVis's Risk of Bias Tracking Media to obtain the Risk of Bias extraction results (Figure 2).

Figure 2. Risk of Bias



DISCUSSION

The context of coping in a disaster, crisis, or epidemic situation is a trend and technique used by individuals to develop the results they expect from the conditions or events. Coping is concerned with oneself's capacity to build a strategy or set of activities so that individuals survive, recover from situations, and even develop their conditions after experiencing crisis, disaster, or outbreak^(12,13). Coping is an adaptive response to stressors, including active coping behavior such as the thought process of finding solutions, planning efforts to solve problems/perceived stressors. Coping as a mental defense mechanism for each individual also has ineffective coping conditions such as dysfunctional coping types. This coping shows avoidance behavior, rejecting

reality, distraction and self-destructive behavior, even alcohol and narcotics consumption, and malicious emotional behavior such as self-blame ⁽¹³⁾.

During the pandemic, the application of social distancing resulted in vulnerable populations becoming one of the groups experiencing the worst impacts, so modifying policies' focus on vulnerable people in facing obstacles during social distancing policy. Their welfare needs attention because of the low access to social and health services that vulnerable groups can reach, especially children, pregnant women, and older adults ⁽¹⁴⁾.

Children Populations

During the pandemic, children are obliged to adapt to the surroundings either consciously or not. Below are the adapting ways to help children that experiencing pandemic:

- Sick children: during a pandemic, children with signs and pneumonia symptoms are categorized as patients suspected of having a positive risk of COVID-19. Several other changes related to health protocols such as wearing masks, keeping a distance, prohibiting hugging, kissing, playing with other patients, or not allowing people to visits the children during inpatient. The needs of attention from nurses who are on service for this case are essential to reduce transmission between adults and children.

- Healthy children: healthy children who stay at home for a long time will undoubtedly face boredom. Parents will have more time to play with their toddlers. Parents' creativity to make children feel at home is very much needed in this case. Parents who work from home, and parents who do not work will have difficulties dealing with their children, especially after school. Parents are forced to adapt and to try hard not to leave behind during online school learning methods. Teachers and schools also have an essential role because they must provide a system and facilitate children and parents so that schools continue to run according to the competencies that must be achieved.

- Children with special needs (disabilities, cancer, chronic diseases, and mental disorders): children with special needs need more significant and more dynamic efforts, education, and adaptation to changing conditions during a pandemic. The measures must be in line with supportive policies so that they, with special requirements, remain fulfilled and do not cause worsening conditions.

Coping barriers on children, sick or healthy, or children with special needs, require parents' ample attention. The obstacle for sick children during the period of care needs particular attention, especially in psychological problems that tend to be higher⁽¹⁴⁾. This is because not all hospitals allow children who are positive for COVID-19 to be accompanied by their parents, while there is also the possibility that children are separated from parents who are positively sick and quarantined. It needs understanding from the surroundings about the conditions faced and assistance from other people except the parents whose children trusted. Kazzaz⁽¹⁵⁾ stated that hospital preparation and focus on infection prevention, and attention to aerosol procedures must be considered in high-risk children while in the hospital ⁽¹⁵⁾.

For healthy children themselves, especially children who still have a basic immunization schedule, vaccines must always be given. During school closures, they must be mentored by parents, and a teacher should accompany parents as well. Kaden⁽¹⁶⁾ states that teachers also have problems in teaching students, mainly due to the internet's unavailability in some of the students' homes in the regions. Due to internet technology, teachers themselves will find it challenging to explain the subjects, especially during practices, because teachers cannot directly lead them⁽¹⁶⁾. Roca, Melgar, Gairal-casado, & Pulido-rodriguez⁽¹⁷⁾ stated that in the learning model used during the pandemic, children need mentors and assistance in doing their works; a mutually supportive environment is necessary among teachers, school, family, and community⁽¹⁷⁾.

Children with cancer should keep receiving the treatment, but with modifications to prevent cross-transmission between patients, especially with adult patients. Parents of children with cancer are the ones most afraid of the risk of their child becoming infected. Therefore, the health workers can provide medical planning through telephone or teleconference. Children who need oral drug therapy can get it through delivery services without going to the hospital⁽¹⁸⁾. Children with mental retardation, intellectual disabilities, and autism must have access to easily understood information⁽¹⁵⁾.

Pregnant Women Populations

This systematic review study explores the psychological effects of crises on pregnant women. Pregnancy affects mental strength, physical health, and can sometimes increase the susceptibility to depression. A study shows that pregnant women's psychological effects on the COVID-19 pandemic are in the range of moderate to severe. Anxiety is mainly associated with disease transmission; even studies show that in the first-trimester, they are in higher anxiety and psychological problems than in the later trimester⁽¹⁹⁾. They are prone to have health problems during and after the crisis conditions due to physiological and psychological stress, trauma, and limited access to health services. Exposure to disaster or crisis conditions is extensive and becomes an important determinant of their fetal health⁽²⁰⁾. Furthermore, their coping in facing crises, including disease outbreaks, is subjective and is very likely to be influenced by the intensity of the stressors they feel⁽¹³⁾.

Coping by pregnant women with a high level of stress is related to the conditions of the crisis or disease outbreaks they experienced^(12,21). Studies show that they have to cope with mild or moderate stress levels that focus on problem-solving (problem-focused coping). Furthermore, adaptive coping, which is often used by them related to crisis conditions, natural disasters, and epidemics, is emotion-focused coping, namely positive attitudes and behaviors, including seeking emotional support from others and finding the positive side of the events. Studies show that this coping is often demonstrated when facing a disaster, epidemic, or prolonged crisis more than problem, focused coping, and dysfunctional coping⁽¹³⁾.

Policies related to health quarantine or social restrictions in the COVID-19 pandemic have also become challenges in coping mechanisms with the emotion-focused coping type due to limited social interactions⁽²²⁾. However, the use of modern technology and social media can overcome this condition. Intensive communication with a limited number of people can still help expressing empathy, active listening, sharing

information, and achieving emotional coping even with the social restrictions^(22,23). Perinatal anxiety and depression in pregnant women, which are likely to increase due to crisis, disaster, or epidemics, can be treated with various activities. Doing hobbies or games may improve mental conditions; others listen to music, sing, play musical instruments, and seek information related to efforts to maintain health. Attachment between individuals and crises they face directly (adapting to pandemic conditions) is one coping mechanism to improve psychological well-being and reduce post-traumatic stress^(20,22,24).

Older adults Populations

COVID-19 has brought changes to daily routine activities, health services, provision of social support, social skills, and older adults' perceptions. Older adult groups get challenges with spending more time at home, limited contact with family members, friends, and the environment, limitations in carrying out work and hobbies, and increased anxiety and fear of death that can happen due to a pandemic⁽²⁵⁾. Based on the Decade of Healthy Aging 2020–2030 Guidelines established by WHO, all countries must put maximum efforts in providing full health services for the older adults through several actions, including creating or increasing national programs to raise awareness of their welfare and healthy aging, developing evidence-based policies in all sectors of society to increase community capabilities, and increasing public knowledge and awareness, as well as stimulating dialogue between generations⁽⁷⁾.

Older adults are the aggregate of the most vulnerable group during the COVID-19 phase. In general, they experience physical, mental, and social perspective barriers and can become a heavy burden on the care services⁽²⁶⁾. Studies reported that this group has lower depression feelings and can be more resilient and emotionally accepting than those in the younger aggregate⁽²⁷⁾. Although the level of acceptance and resilience positively impacts the improvement of physical, cognitive, and mental health conditions during the pandemic phase, the level of resilience experienced by them often worsens due to chronic conditions physical limitations. States with a low level of grit and comorbid conditions can make them more vulnerable than they without comorbid conditions. The cure rate for older adults is very much depend on acceptance and strong community fortitude. Below are some of the changes that occur in the older adults and ways to control the changes that occur:

- Daily activities and community support: During the pandemic phase, they who live alone are at risk of decreasing health support from their families (such as care for sickness, health monitoring, and maintaining household hygiene). Their daily activities are among the most challenged during the pandemic. The community can assist them in fulfilling their daily needs during a pandemic.

- Access to information and public education: They who are less likely to access internet-based media can be facilitated through traditional media services that are more likely to be accessed by them, such as television, newspapers, magazines, and radio.

- Health care: Aging has become the most significant risk factor for the emergence of chronic diseases, including cardiovascular disease, diabetes mellitus, cancer, and cognitive disease. These diseases have become comorbid in older adults, which makes them more susceptible to other infectious diseases. Health workers must

minimize their physical presence at the health services because of the risk of transmission. As a result, the risk of them having obstacles in accessing health services is high; therefore, health workers must pay special attention in providing routine health services through several ways such as telemedicine, long-term prescription of drugs, and regular home visits. Especially for the implementation of home visits, health workers must be aware of transmission from nurses who make home visits, which is the most common cause of transmitting COVID-19 that occurs in older adults.

- Older adults mental health issues: Older adults who live alone have a higher risk of loneliness and feelings of helplessness, and the current pandemic can exacerbate these conditions. Health workers must pay attention to their psychological well-being as a follow-up to limited access to the internet and pieces of information that occur during a pandemic.

The results showed that 36% of the older adults reported stress problems, while 42.5% experienced loneliness, almost a third of them said the increasing loneliness during the social distancing phase. Overall, physical activity, lifestyle, and sleep pattern changes are significant during the social distancing phase. These findings can become the basis for implementing older adults' policies during a pandemic ⁽²⁸⁾. The pandemic has changed the quality of life due to socio-demographic conditions and access to health services. The older adults who have a good perception of health, adaptive family functions, high levels of resilience, and high level of acceptance have a high coping during pandemic. Health workers need to pay attention to individual resources that can affect their psychological well-being during the pandemic phase to prevent worsening their health conditions⁽²⁹⁾.

Older adults often experience bad conditions due to the pandemic. This is exacerbated by the marginalization of policies by the Government. During the pandemic, health services often refuse groups of older adults to undergo screening because they have a high risk of transmissions due to their age and may increase transmission incidence. As a result of refusal from health services, families (especially wives/daughters) are often becoming the sole caregiver for them at home. This also causes women carers to experience changes in their work and health ⁽³⁰⁾. Pandemic led to the emergence of new services for Older adults using telecommunications technology and home care programs. There is an increasing acceptance and determination to maintain positive coping as the primary keys of this new service program. The pandemic's bitter experiences will make the world think further about handling Older adults' health through new approaches ⁽²¹⁾.

CONCLUSIONS

Pandemic that occurs over a long period can increase vulnerability, especially in the health sector, affecting vulnerable populations in society, consisting of children, pregnant women, and older adults. Vulnerable populations have various coping mechanisms and are affected significantly by the presence or absence of social support from family, community, and the government. The government's attention to the quality of specific health services for vulnerable populations can improve their welfare and health status.

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