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Old-Age Poverty in the ASEAN Member States: A Scoping Review of the Literature

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Abstract

Poverty eradication remains a top priority for policymakers around the world. At the same time, population aging trends indicate a strong need to understand and address poverty in later life. While there is a lot of literature on poverty, there is not much on old-age poverty. The goal of this review is to outline current empirical research on old-age poverty, identify knowledge gaps, and make recommendations for future research. Comparison analysis had been done among ten countries in ASEAN members. The findings reveal most of the old age poverty is female. While health issues are the paramount factor that affected old-age poverty. Moreover, social pension schemes and financial assistance are crucial in eradicating old-age poverty. The results of this study have implications for understanding old-age poverty in ASEAN member countries from a profile of old-age poverty, factors that influence old-age poverty, and viable eradication policies and programs in developing countries worldwide.

Keywords: Old Age Poverty, Population Aging, Comparative Analysis, ASEAN, Scoping Review

Introduction

In 2015, all United Nations Member States adopted the Sustainable Development Goals (SDGs) as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. Seventeen goals are included in SDGs which have different missions (United Nation, 2015). Countries have promised to leave no one behind by accelerating progress for those who are the furthest behind first. As a result, the SDGs are intended to bring the world to several life-changing 'zeroes,' such as zero poverty and hunger (UNDP, 2015). Two goals that relate to the no poverty and hunger are the first and second goals of SDGs which are no poverty and zero poverty. As SDGs trying to put an end to poverty and no hunger in all of its forms everywhere, therefore there is a need to review and examine poverty, especially for ASEAN members.

If ASEAN members plan to maintain their current achievements, the region will make significant progress toward eradicating poverty rates. The ASEAN region, made up of Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam also trying to adopt the SDGs in terms of economic development. Each country

has its economic development. The country's good economic growth has helped to reduce poverty and improve livelihoods and people living under certain parts of the population (Knodel & Teerawichitchainan, 2017).

The economic, demographic, political, and social structures of the ASEAN member states (AMS) are not uniform. The ILO and ASEAN Secretariat (2020) classified the AMS into three categories based on economic and socioeconomic indicators: Group 1: Singapore and Brunei; Group 2: Malaysia, Thailand, Indonesia, the Philippines, and Vietnam; Group 3: Cambodia, Lao PDR, and Myanmar, each has a huge fraction of its community employed in agriculture. The demographic structure of AMS varies depending on mortality, fertility, and migration trends. According to Coulmas (2007), the AMS can be divided into three categories. 1) Aged: Singapore and Thailand, where the population of people aged 65 and up has doubled or will double from 7% to 14% in 2021 and 2022, respectively. 2) Ageing/Mature: composed of countries with an ageing population that is expected to double its population aged 65 to 14 percent in the near future, namely Vietnam (2035), Brunei (2037), Indonesia (2044), and Malaysia (2044), 3) Young: Cambodia, Lao PDR, Myanmar, and the Philippines are among the AMS in this category. The Philippines would take approximately 30 years to achieve aged nation status, whereas the rest of the group is predicted to age rapidly (ILO & ASEAN Secretariat, 2020).

The world's population is aging. According to the United Nations Department of Economic and Social Affairs (UNDESA, 2015), one in every eight people worldwide was 60 or older in 2015. They predicted that by 2030, the older population would outnumber children (aged 0–9 years) for the first time in human history and that by 2050, it would outnumber adolescents and youth (aged 10–14 years). The primary causes of this unprecedented demographic shift in age compositions are declining mortality and fertility rates. In the twenty-first century, population aging is a major global issue, presenting both opportunities and challenges to society (United Nations Population Fund [UNFPA] and HelpAge International [HAI], 2012). The region is hugely quickly becoming an ageing society, with a rising number of elderly people, most of whom are women. A significant number of older people work and remain in formal and informal labour markets due to financial and other needs. Even if some of them are impoverished, particularly those living in poor and overcrowded urban and rural areas, others actively contribute to economic growth by participating in the Silver Economy, which recognizes the potential buying power and particular needs of the community over 60 years old.

Elderly people tend to encounter ageism and discrimination, as well as abuse and neglect. However, as older people in the region assert their agency and independence, there is a greater demand for policy innovations that promote dignity, respect and guarantee equal access to the long-term care (ASEAN, 2020). In addition, a few policies had ambiguous concepts, complicated practice guidelines, and impractical practices (Jitramontree & Thayansin, 2013).

For Instance, as the absolute and relative numbers of the elderly in Vietnam have increased over time, the challenges posed by an aging population have played an increasingly important role for social policymakers (Giang & Pfau, 2009). Furthermore, increasing the

number of aging people while a decrease in the potential support will create a problem for the elderly (Suwanrada, 2009). When given the opportunity, older people can (and do) play valuable roles in society (economically, socially, and culturally). Poverty and social exclusion, on the other hand, are two of the most significant barriers to older people being able to "contribute to the development and reap its benefits" (UNFPA & HAI, 2012, p. 12). In the context of global aging, a more nuanced understanding of and discourse on old-age poverty is therefore relevant and pressing. Meanwhile, have elderly women who never worked in their lives (Masud et al., 2008).

This review aimed to map out the previous studies on old-age poverty to synthesize the knowledge base on old-age poverty in the ASEAN region. We aimed to summarize how the studies conceptualized old-age poverty, identify the incidence of poverty, investigate the profiling of the elderly poor, investigate the factors influencing elderly poverty, and illustrate the poverty eradication policy and program. Following this, we identified knowledge gaps in current research and made recommendations for future research.

Methods

Data Sources, Search Strategy, and Eligibility Criteria

A literature search was conducted in March 2021 in six databases: Scopus, Science Direct, SAGE, Willey Online, Pub Med, and Google Scholar. The key terms older persons and poverty (and their synonyms) were searched in the abstracts. Inclusion criteria included: peer-reviewed, empirical research, published in the last 41 years (1980-2021), written in English, and with available links to full-text articles. The search resulted in 281articles, once duplicates were removed, and abstracts were scanned for relevancy, 40 articles remained for a full review.

Data Extraction

We extracted the data using three different excel spreadsheets. The first contained descriptive and methodological characteristics of each study and included: the author(s)' name(s), year of publication, the location of study, methodology (quantitative, qualitative, or mixed), sample (which included sample size and age of participants) and variables. The second spreadsheet included extracted quotes and statements describing the conceptualization of old-age poverty, and the final spreadsheet contained the main objective(s) and key findings (s) of the study. Moreover, a comparative analysis among ASEAN countries will be done based on the profile of old-age poverty, factors influencing old-age poverty, and eradication policy and programs.

Results

Descriptive and Methodological Characteristics

Table 1 presents the descriptive and methodological characteristics of each study.

Table 1

Descriptive characteristics of studies

	Location	**Author (s); year**	**Methodology**	**Sample size; age**
Single-country studies (n = 33)	Brunei	Gweshengwe et al., 2020)	Quantitative (Cross-sectional survey using their own survey) and secondary data from government report.	N = 208 Household; and key information (Not mention age)
	Cambodia	Runsinarith, 2012	Quantitative (Cross-sectional survey using their own survey in 2001, 2004 and 2008)	N = 827 (Not mention age)
	Cambodia	Zimmer, 2008	Mixed method (Cross-sectional survey using their survey in 2004/ interview)	N = 1273 (60+)
	Indonesia	Muis et al., 2020	Mixed method (Cross-sectional survey using data of Makassar City Social Office in June 2019 & interviews, observation and focus group)	N = 262 (60+)
	Indonesia	Priebe, 2017	Quantitative (Cross-sectional survey using annual March rounds of National Socio-economic Survey (Susenas) from 2007 to 2012)	N = 75, 000 households - 250, 000 individuals. (60+)
	Indonesia	Utomo et al., 2018	Mixed method (Cross-sectional survey using their own survey & Interview)	N = 2462 elderly for survey (60+); 100 respondents (Interview)
	Lao PDR	Nambooze et al., 2014	Quantitative (Cross-sectional survey using The Mini nutritional assessment (MNA) questionnaire and Determine Your Nutritional Health checklist were used to assess nutritional status)	N = 144 elderly (65+)

	Malaysia	Ismail et al., 2015	Quantitative (Cross-sectional survey using data on Household Income Survey (HIS) collected in year 2009-2010)	N = 16,325 elderly (60+)
	Malaysia	Mohd et al. 2014	Quantitative (Cross-sectional survey using 2009 Household Income Expenditure Survey (HIES))	N = 7,708 observations (not mention)
	Malaysia	Lee, 2002	Not mention	Not mention
	Malaysia	Vaghefi et al., 2016	Quantitative (Cross-sectional survey using their own survey)	N = authors did not report sample size (65+)
	Malaysia	Mohd et al., 2018	Quantitative (Cross-sectional survey using the Household Income Survey (HIS) data collected by the Department of Statistics for 2009 and 2012 for northern region of Malaysia)	N = urban area is 6,712 and 6,659 households for the years 2009 and 2012 respectively, and rural area is 6,503 and 4,415 for the same years (not mention)
	Malaysia	Jariah et al., 2012	Quantitative (Cross-sectional survey using their own survey - Questionnaire, Multistage systematic sampling)	N = 2327 elderly (multistage systematic sampling) (55 - 75 years)
	Malaysia	Zainalaludin, 2012	Quantitative (Cross-sectional survey using their own survey)	N = 735 (Not mention age)
	Malaysia	Sulaiman & Masud, 2012	Quantitative (Cross-sectional survey using their own survey)	N = 1,841 (between 55 to 75 years)
	Malaysia	Mohd et al., 2016	Quantitative (Cross-sectional survey using their own survey year 2009 and 2012)	N = authors did not report the sample size (65+)

	Malaysia	Masud et al., 2008	Qualitative (Interview)	N = 1,841 residents (55 - 75)
	Malaysia	Masud & Haron, 2008	Qualitative (Interviewed - randomly selected nationwide using the stratified random sampling technique)	N = 2327 elderly (55 - 75)
	Myanmar	Teerawichitchainan & Knodel, 2015	Quantitative (Cross-sectional survey using data Survey 2012 Myanmar Aging Survey - MAS)	N = 40,480 persons (60+)
	Myanmar	(Knodel & Teerawichitchainan, 2017)	Quantitative (Cross-sectional survey using data Myanmar Aging Survey (MAS) year 2012)	N = 4,080 (60+)
	Myanmar	Teerawichitchainan & Knodel, 2018	Quantitative (Cross-sectional survey using data Myanmar Aging Survey (MAS) year 2012)	N = 4,080 (60+)
	Philippines	Cahapay, 2021	Desk review (Primary and secondary data)	N= author did not report the sample size (60+)
	Singapore	Tham et al., 2003	Qualitative (Interview)	N = 210 non-critically ill patients (65+)
	Singapore	William, 2001	Not mention	N = author did not report the sample size (60+)
	Singapore	William, 1998	Not mention	N = author did not report the sample size (60+)
	Thailand	Suwanrada, 2009	Not mention	Not mention
	Thailand	Jitramontree & Thayansin, 2013	Qualitative (in-depth interview and stakeholder meeting)	N = 45 (30 key informants from various sectors, 10 old persons

				& 5 community leaders) (Authors did not report the age)
	Thailand	Caffrey, 1992a	Mixed method (Cross-sectional survey using their own survey and Interview)	N = 89 households (65+), 39 cargivers from selected households (interviewed)
	Thailand	Caffrey, 1992b	Mixed method (Cross-sectional survey using their own survey and Interview)	N = 89 households (65+) and 32 elders
	Viet Nam	Evans & Harkness, 2008	Quantitative (Cross-sectional survey using their own survey)	N = authors did not report the sample size and age
	Viet Nam	Long & Pfau, 2009a	Quantitative (Cross-sectional survey using the Vietnam Household Living Standard Survey)	N = 3,806 (60+)
	Viet Nam	Long & Pfau, 2009b	Quantitative (Cross-sectional survey using data Viet Nam Household Living Standard Survey in 2004)	N = 3,806 (60+)
	Viet Nam	Pfau & Long, 2010	Quantitative (Cross-sectional survey using data four household surveys conducted in Viet Nam between 1992 and 2004)	N = 15,168 Households or 45,653 elderly (60+)
Studies at the local level (n = 7)	Malaysia	Wan Ahmad, Desa, et al., 2017	Qualitative (structured and unstructured interviews with research participants, coupled with observations on their daily lives)	N = 78 older persons (50 - 79 years)
	Malaysia	Wan Ahmad, Mohd Kashul, et al., 2017	Qualitative (Convenience sampling, structured and unstructured interviews & observations on daily lives) (64+)	N = 76 older persons (50+)

	Malaysia	Evans et al., 2017	Qualitative (semi-structured interviews) Sampling was purposive, based on gender, ethnicity, and socio-economic status.	N = 40 older persons (65+)
	Malaysia	Zainuddin et al., 2020	Qualitative (in-depth case interview, where a thematic analysis technique was used)	N = 24 elderly (60+)
	Thailand (province of Chai Nat)	Gray et al., 2008	Quantitative (Cross-sectional survey using their own survey)	N = 1,036 (55+)
	Thailand (Mitrapap slum in Khon Kaen city)	Coronini-Cronberg et al., 2007	Quantitative (Cross-sectional survey using their own survey)	N = 72 (author did not report the age)
	Viet Nam	Thanh et al., 2005	Quantitative (Cross-sectional survey using their own survey)	N = 24,776 people (5801 households) (not mention)

Location

The review included 32 single-country studies that focused on examining old age poverty at the national level. The remaining seven articles were studies that looked at old age poverty on a more local scale, such as a province (e.g., Chai Nat province, Thailand).

Methodology

Nineteen of the studies were based on quantitative research designs, 8 utilized qualitative approaches, and 5 studies employed mixed methods. All the quantitative studies utilized cross-sectional surveys. Most (n = 11) used cross-sectional surveys developed and 11 studies utilized secondary data sets (e.g. annual March rounds of the National Socioeconomic Survey (Susenas) from 2007 to 2012, The mini nutritional assessment (MNA) questionnaire, Household Income Survey (HIS) collected in the year 2009-2010, Household Income Expenditure Survey (HIES), Household Income Survey (HIS) data collected by the Department of Statistics for 2009 and 2012 for the northern region of Malaysia, Survey 2012 Myanmar Aging Survey – MAS, Myanmar Aging Survey (MAS) year 2012, Viet Nam Household Living Standard Survey, Viet Nam Household Living Standard Survey in 2004, four household surveys conducted in Viet Nam between 1992 and 2004) for the study. Nine studies utilized qualitative research designs, with semi-structured interviews as the data collection method. While five studies used a mixed methods methodology. Previous research made up of papers from Brunei (1 paper), Cambodia (2 papers), Lao PDR (1 paper), Malaysia (5 papers), Myanmar (3 papers), Philippines (1 paper), Singapore (3 papers), Thailand (5 papers) and Viet Nam (1 paper).

Sample Size and Age

The sample sizes of the studies can be broadly classified as large or small. The sample sizes for the quantitative cross-sectional studies ranged from 144 to 250,000. The sample sizes for studies based on national secondary data sets were in the mid to upper range. Furthermore, the sample size range among cross-sectional surveys varied because some studies reported weighted sample sizes while others presented unweighted numbers. The sample sizes for the three qualitative studies ranged from 24 to 2327. The sample size for the mixed-method study ranged from n = 29 to n = 2462. The age criterion used to define old age in the studies varied: most used the 60+ cut-point (n = 15) or the 65+ cut-point (n = 6); three studies each used age 55 to 75, a study used age 55 to 79, one study used 50+, and one study used cut point 55+ as indicators of old age.

How is Old Age Poverty Conceptualized?

The way in which poverty is defined in the studies can be grouped into four types as portrayed in Table 2. Most studies (n = 24) defined poverty based on income and consumption measures. Less common were poverty indicators based on assets or wealth measures (n = 2), self-perceived poverty (n = 1), and poverty based on other measures (n = 9). Table 2 shows the poverty measures in the studies.

Table 2
Poverty measures in studies

Author (s); year	**Income and consumption**	**Assets/wealth**	**Self-perceived poverty**	**Other**
Cahapay, 2021	x			
Evans & Harkness, 2008	x			
Long & Pfau, 2009a	x			
Long & Pfau, 2009b	x			
Ismail et al., 2015	x			
Mansur & Haron, 2008	x			
Masud et al., 2008	x			
Mohd et al., 2014	x			
Mohd et al., 2016	x			
Mohd et al., 2018	x			
Pfau & Long, 2010	x			
Priebe, 2017	x			
Runsinarith, 2012	x			
Sulaiman & Masud, 2012	x			
Suwanrada, 2009	x			
Vaghefi et al., 2016	x			
Wan Ahmad et al., 2017a	x			
Wan Ahmad et al., 2017b	x			
William, 1998	x			
William, 2001	x			
Zainuddin et al., 2020	x			

Coronini-Cronberg et al., 2007	x			
Gweshengwe et al., 2020		x		
Zimmer, 2008		x		
Gray et al., 2008			x	
Caffrey, 1992a				x
Caffrey, 1992b				x
Teerawichitchainan & Knodel, 2015				x
(Knodel & Teerawichitchainan, 2017)				x
Teerawichitchainan & Knodel, 2018				x
Tham et al., 2003				x
Thanh et al., 2005				x
Muis et al., 2020				x
Evans et al., 2017	x			x
Utomo et al., 2018	x			x

Category 1, poverty based on income and consumption measures

The majority of studies conceptualized poverty through objective indicators such as income and consumption levels. These two indicators were frequently combined into an income indicator based on a specific income level based on calculations of various costs of living. In contrast, for studies that used a consumption indicator, a specific income level was assigned to meet consumption needs.

Nineteenth out of twenty-four studies used poverty line income to measure elderly poverty. These poverty lines are viable and different between countries. For example, Ismail et al., (2015) income per capita measurement where it's different between a region which is equivalent to RM210, RM240, and RM230 per month for Peninsular, Sabah, and Sarawak respectively. Albeit, some of the studies used the National Poverty Line Income as their measurement of poverty such as Mohd et al (2014), who defined the elderly become poverty when their income is lower than the National Poverty Line Income in 2019 (RM800). Other than that, Mohd et al (2018) also used National Poverty Line Income to measure the elderly poverty were having income less than RM790 and RM840 based on rural and urban respectively. As same with the above studies, Mohd et al (2016) also used National Poverty Line Income to measure poverty. Other than that, the study by Desa et al (2017); Kashul et al (2017) also reported that the elderly become poverty when the income level is less than the poverty line (RM870). Moreover, other studies such as Sulaiman & Masud (2012); Zainuddin et al (2020); William (2001); Evans & Harkness (2008) also used poverty levels to measure the elderly poverty.

Albeit, one of the studies in Singapore utilizes National Average Monthly Income, such as William (1998), who defined low income in their study as a monthly income of less than S$3,000. In contrast, two studies (Suwanrada, 2009; Coronini-Cronberg et al., 2007) in

Thailand measured poverty by using specific annual income and monthly income such as annual income less than 20,000 Bath or 1,242 Bath monthly per capita will consider as poor.

Other studies focused more on consumption expenditures such as Runsinarith (2012); Priebe (2017); Long & Pfau (2009a); Long & Pfau (2009b); Pfau & Long (2010), who conceptualized old age poverty using Village Poverty Line and per capita expenditure. The village poverty line interprets consumption based on per capita expenditure on food and non-food consumption which is based on the formula proposed by (Foster et al., 1984). Albeit, per capita expenditure, conceptualized poverty based on the value of average per capita expenditure where below VND 2,077,000 is classified as poor. This measurement was used in both studies by Long & Pfau (2009a, b) to identify the elderly poverty in Viet Nam.

Category 2, poverty based on asset or wealth measures

Only two studies used an assessment of assets or wealth as a poverty measurement indicator for old-age poverty. The household wealth index, which "is widely used in recent analyses that consider poor countries," was used in Zimmer's (2008) study of old-age poverty and health in rural Cambodia (p. 60). This measure of old age poverty was based on household assets such as a "radio, television, jewelry, motorcycle, fan, telephone, car, or refrigerator," as well as structural components such as a "modern toilet, which is defined as an indoor flushable toilet [and] a modern floor, which would be characterized as a floor built with modern materials, specifically finished wood, vinyl, asphalt, ceramic, marble, or cement, as opposed to a floor built with dirt, clay, unfinished wood, or similar types of primitive materials" (p. 60). Albeit a study by Gweshengwe et al (2020) also uses assets or wealth to investigate the old person's poverty which reveals that the community in Brunei defined poverty as a lack of basic needs, food insecurity, financial deprivation, and material lack.

Category 3, Self-Perceived Poverty

A subjective indicator of old age poverty was included in a study. Participants in these studies were frequently asked to rate their poverty on a predetermined scale. For example, the study by Gray et al., (2008) ask the community in Thailand to relate their feeling of relative poverty when compared to their neighbors. The authors ask their participants whether they feel poor compared to their neighbors, with three different responses: are "feeling poorer than your neighbors, feeling just as poor as your neighbors, and not feeling poor" (p. 216).

Category 4, other Measures of Poverty

Nine studies included another measure of poverty, including poor health status (Muis et al., 2020; Teerawichitchainan & Knodel, 2015; Knodel & Teerawichitchainan, 2017; Teerawichitchainan & Knodel, 2018; Tham et al., 2003; Caffrey et al 1992a,b; Thanh et al., 2005), social engagement (Utomo et al., 2018) and financial support (Evans et al., 2017). For example, in the study by Utomo et al (2018), a poor elderly in rural Indonesia refers to the lack of social engagement in terms of participation in income-generating activities, communal activities, and care work. Moreover, in a study by Teerawichitchainan & Knodel (2015) older person was considered poor if they have difficulty in preparing money allocation for health.

Prevalence an Incidence of Poverty

Of the nineteen studies, most researchers (n = 10), sought to estimate old age poverty incidences using poverty line income. Five using poverty rates based on consumption expenditure and four studies used alternative measures or methodologies.

Mostly five out of ten studies using poverty line income to examine the old-age poverty incidence reveal that there has an increasing trend in old-age poverty. For example, a study by Mohd et al (2014) tries to find the factors influencing old-age poverty in Malaysia. By using poverty line income (PLI) in measuring old-age poverty, there is an estimated increase in poverty incidence among the elderly in Malaysia in the year 2009 survey Household Income Expenditure Survey. Other than that, Ahmad et al (2017) studied, another example, using poverty line income to identify the elderly poverty by using poverty level. Considering the poverty level, which is RM870, they reported that an increasing number of elderly poverties which majority have income below than poverty level. This study investigates the poverty scenario in rural areas in Kedah, Malaysia. The study by William (1998) used the National average monthly household income to measure the poverty among older people in Singapore and found that there has a higher incidence of poverty. Where households there got low average monthly income. Another two studies by Masud et al (2008); Masud & Haron (2008) reported that elderly income was below the poverty line or very low. Masud et al (2008), were trying to identify the gender differences in income sources of the elderly in Peninsular Malaysia. They reveal that three-quarters of the elderly received income below the poverty line and the majority were women. Similarly, Masud & Haron (2008) revealed the elderly income sources of old persons in three regions of Peninsular, Sabah, and Sarawak. The annual income was measured to identify elderly poverty. They found that the elderly annual income in Malaysia is very low.

In contrast, five studies reveal a decline in poverty rate or no old age poverty encountered. For instance, Sulaiman & Masud (2012) identify elderly poverty using the poverty level of earning per capita income. Considering older people in Peninsular Malaysia, they reveal that only 47% are in a poverty situation and most were elderly women. Other than that, Mohd et al (2016, 2018) also found that reducing the percentage of poverty incidence in Malaysia. Mohd et al (2018), compare elderly poverty between two living arrangements which are the urban and rural communities. By using National poverty line income as their measurement of elderly poverty, they reported reducing the percentage of poverty incidence by state and year. Another study by William (2001), tried to examine the changing patterns of poverty in Singapore. Defining poverty as referring to the income level (poverty line), they reported that extreme poverty has declined. A study by Ahmad et al (2017), obviously reveal that nearly all older people in Kedah, Malaysia, are not living under the poverty level because of money remittances from children. This study measures poverty using income level which precisely states that an older person can be classified as elderly poverty if their income is lower than RM870. This study was conducted in Malaysia.

As aforementioned, elderly poverty incidence has also been investigated using the poverty rate. This measurement uses consumption per capita expenditure to examine the incidence of poverty. For instance, Priebe (2017), conducted a study to measure the issues and living arrangements. By using the poverty rate to identify the poverty where there use consumption

expenditures per capita found that poverty rates among the elderly are decline over the year but significantly higher than the overall population. Poverty is highest in the age of 75+. A study by Long & Pfau (2009a) investigates the impact of poverty in rural and urban areas. By using the poverty rate which is the average household per capita expenditure as their based line for elderly poverty in Viet Nam, they reveal that the incidence of poverty rate is different based on region. The average household per capita expenditure is less than 2 077 000 Viet Namese dong (VND) ($US132.30). Another study conducted by Long & Pfau (2009b) is trying to quantify the potential role and impacts of the social pension scheme in reducing elderly poverty in Viet Nam. Using the poverty line measurement based on per capita expenditure per year, they found that social pension can reduce the incidence of elderly poverty. In addition, Pfau & Long (2010) tried to identify the effect of social pension, living with children, and remittances on elderly poverty. Considering survey conducted between the years 1992 and 2004 shows that the poverty rate of the elderly was 37.9%. Measuring poverty has been done using per capita expenditure which is less than 1,790,000 Viet Namese dongs considering poverty.

Three of the studies that estimate poverty incidence using alternative measurement, use health measurement as one of the poverty incidence measurements. For example, Muis et al (2020), discuss the elderly poor problems in terms of work and aspects. This study identifies elderly poverty based on health. They found that the percentage of elderly poverty is high since mostly the elderly don't have work. A study by Teerawichitchainan & Knodel (2015), examines the association between poverty, economic inequality, and health among the elderly in Myanmar. By using Survey 2012 Myanmar Aging Survey, they assumed that an unhealthy older person represents poverty. Moreover, they identify an increasing trend in the incidence of elderly poverty. In contrast, Gray et al (2008) measure poverty by using self-perceived poverty. They found that poverty was significantly associated with poorer health statuses. Referring to the elderly in the private household, 54.3 % of them feel that they are poor. Lastly, Gweshengwe et al (2020), identify the community perception of poverty meaning. By measuring old age poverty whether lack of basic needs, food insecurity, financial deprivation, and material lack, they found that only 8.5% of the sample classified themselves as poor.

Comparative Analysis of Old Age Poverty in ASEAN

A comparative analysis on the profile of older persons, factors increasing older person vulnerability to poverty and poverty eradication policy and program are discussed in the context of ASEAN region to observe patterns, similarities and dissimilarities between ASEAN member states (AMS).

Demographic and Health Profile of the Elderly Poor

Table 3 summarizes the similarities and differences in the profile of the elderly poor in ASEAN member countries. The socio-demographic profiles are based on age, gender, education level, health condition and behavior, and living area.

Age: In terms of age, most of the ASEAN countries such as Cambodia, Indonesia, Malaysia, and Viet Nam identified that the risk for the elderly poor mostly increases with age. It means that increasing age will significantly raise the risk of the elderly becoming poor. For instance,

in Indonesia, the elderly are vulnerable to poor when their age is more than 65 years old (Utomo et al., 2018). However, as revealed by the previous research (Teerawichitchainan & Knodel, 2015) in Myanmar, the elderly poor aggressively increases with age above 60 years old (37.7%) and also 70 years old with 41%. In other studies in Philippines (Cahapay, 2021) and Singapore Tham et al (2003)Lee (1998) elderly are grouped as a vulnerable segment and it mostly happens to the elderly aged 60 years old and above. In addition, older adults are grouped as vulnerable poor which a mean age of 70.1 years and the median age of 68.6% years.

Gender: Most of the AMS (Cambodia, Indonesia, Malaysia, Myanmar, Singapore, and Viet Nam) concluded that older women are mostly faced with elderly poverty. In Cambodia, female elderly experience more years of poverty and happen cause of the feminization of aging where 55% of the aged. However, contradicting other countries, Indonesia had mixed findings. The authors (Utomo et al., 2018) found that instead of females having a higher rate of elderly poor, some studies reveal that there is no gender difference in rates, but most female elderly poor (57%) are widowed. Moreover, in Malaysia, a female has a higher poverty rate since they are the head of the family and women have limited capacity (Mohd et al., 2018)(Mohd et al., 2014). Similarly, in Viet Nam, a higher poverty rate is also affected by female elderly at 58.4%. However, contradicting other countries, previous studies in Thailand reveal that the elderly poor are higher among males in age 70 years and above and varies by age and sex.

Education: In terms of education level, most countries admit that the elderly poor also had low or no education level. In Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, Thailand, and Viet Nam, the elderly poor happens to the elder who has low or no education level. For instance, in Indonesia, the elderly only passes primary school and around 28.5% of the elderly poor had high illiteracy which can affect their income and job. Similarly, the previous studies in Lao PDR also reveal that 72.22% of the elderly poor not had an education level and also high level of illiteracy. In Singapore, studies also found that 88.2% of elderly poor have low education levels and had low skills.

Health and Disability: Another profile of the elderly poor is in the context of health conditions and behavior. Most countries found that the older adults are poor reveal to poor or chronic health and illness. As related to Table 3, Cambodia, Lao PDR, Malaysia, Singapore, and Thailand identify that the elderly poor was poor or chronic health (Zimmer, 2008; Muis et al., 2020; Mohd et al., 2016; Teerawichitchainan & Knodel, 2015; Teerawichitchainan & Knodel, 2018; Tham et al., 2003; Caffrey, 1992a).

In Cambodia, besides poor health, the elderly poor also the person who has a functional impairment that caused disability and it keeps increasing with age. Moreover, in Indonesia, the elderly poor is the elder that has a problem with health and activities of daily living (ADL). The elders' disability is increased with age and reduces their ability to work. As they were unable to work and get income, therefore, they seek treatment at lower cost facilities. As revealed by several authors conducting the studies at Lao PDR, they concluded that the elderly poor in that country had malnourished, poor health, and most of them had limitations in carrying ADL. In Malaysia, chronic health, combined with less physical functioning was the

profile of the elderly poor. Similar to Lao PDR, (Nambooze et al., 2014) reveals that the elderly poor in Myanmar are those who need help with daily living activities (66.67%). As in most countries, the elderly poor in Singapore was the elder who had a chronic illness. Moreover, compared to other countries, in Thailand, the elderly poor people have poor health and limited functional ability such as pain hip, knee joints, and lumbar area. (authors). In the living area context, mostly elderly poor in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Thailand, and Viet Nam, live in the rural area. The higher proportion of elderly poor in the rural area is due to the migration of the young people.

Table 3
Socio-demographic Profile of the old-age poverty in ASEAN members

Profile of Elderly Poor	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
Age	• Listed as vulnerable segment • Risk increases with age	• More vulnerable: 65+ • Poverty increases with age	-	• Listed as vulnerable segment: increases with age	• Aggressively increases with age	• Grouped as a vulnerable segment; • Age 60 and above	• Grouped as vulnerable segment; Mean age 70.1 years, median age 68.6% years; • Age 60 and above	-	• Listed as vulnerable segment • Risk increases with age
Gender	• Female experience more years of poverty • Feminization of ageing (55% of the aged)	• Mixed finding: • Female have higher rate • No gender difference in rates [but most women	-	• Female has higher poverty rate; • Older person's female head of family • Women have limited capacity	• Mostly female	-	• Female	• Vary by age and sex-higher among males especially 70+	• Female experienced higher poverty
Education Level	• Low education	• Low education • High illiteracy	• No education levels • High level of illiteracy	• Without or low education level	• Low level education	-	• Low education • low skill	• Low education	• Low level education

Health Condition and Behaviour	• Poor health • functional impairment • Disability increases with age	• Health and ADL • Reduce ability to work • Increased disability with age • Seeking treatment at lower cost facilities	• Malnourished • Poor health • Many had limitations in carrying iADL.	• Have chronic health conditions • Less physical functioning	• Need help with daily living activities	-	• Chronic illness	• Poor health • Limited functional ability [Pain (hip, knee joints and lumbar area)	-
Rural/ Urban	• Living in rural area • Area prone to disaster • Higher proportion of OP in rural area [due to migration of young]	• Higher in rural area	• Living in rural area	• Living in rural area	• Living in rural area	-	-	• Living in rural area	• Living in rural area

Factors Influencing old-age Poverty

The present study examines the influencing factors of old age poverty among ASEAN countries. Summary of the factors influencing old age poverty were presented in Table 4. Identifying factors that influence old age poverty was one of the crucial things to consider. The following risk factors and processes were discovered to be risk factors and processes for the elderly in ASEAN countries.

Findings from the previous research reveal that health issue was one of the paramount indicators that cause old-age poverty. In all of the ten ASEAN countries, six of the countries which are Cambodia, Lao PDR, Malaysia, Myanmar, Singapore, and Thailand found that poor health among the elderly causes old-age poverty. In Cambodia, besides health issues, other factors such as global economic crises and increased food prices lead to joblessness and reduction in income. Other than that, loss of land, the impact of land development, still the breadwinner despite their age, and reduced capability to work were also affected the elderly to become poor in Cambodia. In Lao PDR, health issues (unnormal nutritional status, common

disease, and problems in daily living activities) and also limited health insurance coverage and social protection, influence the old age poverty in that country.

However, in Malaysia, findings reveal that besides health issues, four more factors that affected old age poverty such as low education, living alone, older women the death of husbands, lower income, and only depend on remittances from children. Even though old age poverty receives remittances from children, that is not enough for their survival (Ahmad, Desa, et al., 2017; Kashul, et al., 2017). Similarly, the studies in Myanmar Teerawichitchainan & Knodel (2018)Knodel & Teerawichitchainan (2017) Teerawichitchainan & Knodel (2015) also found that poor health such as difficulty in the activity of daily living (ADL) and death of a spouse become factors of old-age poverty in Myanmar. The death of a spouse becomes one of the crucial factors in old-age poverty in Myanmar since spouses are the primary indicator of capital and financial support for the elderly (Teerawichitchainan & Knodel, 2018).

Apart from health issues and the death of a spouse, natural disasters such as hurricanes, floods, and earthquakes dampen economic and social development, therefore affecting old-age poverty. Contradict other studies, (Cahapay, 2021) reported that Covid 19 pandemic disrupted working senior citizens' income, food, and medicine for the elderly in Philippines. In Singapore, health issues such as chronic illness and cannot afford to get care, combined with the low education and inadequate financial resources had allowed for old-age poverty.

The analysis also highlights women's vulnerability to poverty among the elderly. Women are vulnerable to poverty because when lacking support, low or without CPF savings, females and limited public assistance. In Thailand, several factors that affected old-age poverty are health issues, financial crises and economic slowdown, political conflict, unpredictable disasters, a rapidly aging population, financial issues, family issues, and still depend on family support, allowing old-age poverty to happen in Thailand. Furthermore, a study by (Giang & Pfau, 2009) concluded that both elderly in rural and urban areas in Vietnam vulnerable to poverty. In the urban area, the older adults have a higher likelihood of poverty such as a non-married, working, older person of more advanced age, from the Northwest region, not living with children and non-recipient of social security benefits. Nevertheless, in rural areas, instead of not married, the older adults have a higher probability of poverty when they are an older person of advanced age, being female, working in agriculture, non-recipient of social security benefits, increasing total household size, and also an ethnic minority. The elderly ethnic minority was identified as one of the vulnerabilities to poverty in Vietnam due to their living in remote areas where economic and physical infrastructure are lagging (Giang & Pfau, 2009).

Table 4
Factors of aged poverty in ASEAN

Study/Author	**Country**	**Cause of Poverty and Vulnerability**
Runsinarith, 2012; Zimmer, 2008	Cambodia	Poor health [physical impairment and needing help; NCD] worsen with age; Health shock Global economic crises and increased food prices Landless Still the breadwinner despite their age, Reduced capability to work;
Nambooze et al., (2014)	Lao PDR	Unnormal nutritional status; Common disease (NCDs); problems limitation in carrying out IADL The limited health insurance coverage and social protection
Zainuddin et al., 2020; Evans et al., 2017; Wan Ahmad et al., 2017a; Wan Ahmad et al., 2017b; Jariah et al., 2012	Malaysia	NCD; Poor dietary habit; Have chronic conditions which increase with age Risk increases with low education and living alone Women elderly who death of husbands Dependent on children but not receiving enough Lower income.
Teerawichitchainan & Knodel (2018); Knodel & Teerawichitchanan (2017); Teerawichitchainan & Knodel (2015)	Myanmar	Poor health daily living activities difficulties increase with age; health system [less focus on the older person], older women have more health issues [almost quarter of older women], activity of daily living (ADL) difficulty Death of a spouse: Loss of breadwinner [female] Vulnerable to natural disasters - dampen economic and social development. Such as hurricanes, floods, and earthquakes.
Cahapay (2021)	Philippines	Covid 19 Pandemic [disrupting working senior citizens' income, food, and medicine]
Lee (1999); Lee (2001); Tham et al., 2003	Singapore	Chronic illness (NCDs); cannot afford to get care Low education and skills Inadequate financial resources Highlights on women vulnerability to poverty: feminization of ageing (50% aged 60+) but lack of support (1) women outlived the spouses [loss of breadwinner]; (2) low or without CPF saving - The CPF scheme is based on individual financing of social security for retirement.; (3) older women more dependent on families for support.; (4) limited public assistance
Suwanrada (2009) Gray et al., 2008	Thailand	Functional ability; Pain (hip, knee joints and lumbar area); Recent financial crises and economic slowdown;

Coronini-Cronberg et al., 2007 Caffrey, 1992a; Caffrey, 1992b		Region affected by political conflict Unpredictable disaster. A rapidly aging population; Households have financial debt; bigger households- lack of income Still depends on family support
Giang and Pfau (2009b)	Viet Nam	***Vulnerability to poverty: Urban poor***: Higher likelihood: non married, working, older person in more advanced age; from Northwest region [***remote region***]; not living with children, non-recipient of social security benefit. ***Vulnerability to poverty: Rural poor:*** Higher likelihood: older person in advanced age, being female, not married, working in agriculture; non-recipient of social security benefit, increasing total household size, ethnic minority

Eradication Policy and Program

As indicated in Table 5, viable policies and programs at different levels had been done by each of the ASEAN countries to eradicate poverty. Throughout the previous research on ASEAN countries, on average, most ASEAN countries (Cambodia, Malaysia, Myanmar, Philippines, Thailand, and Vietnam) implemented social pension policy to eradicate old-age poverty. In Cambodia, besides the social pension system, Cambodia also introduced a vision and financial sector development plan (2001-2010) and financial sector strategy (2006-2015) to eradicate old-age poverty. Furthermore, as one of the aging or mature countries in ASEAN members, Malaysia also had implemented the viable policy to eradicate old age poverty such as the national policy, new economy policy, employee provident fund (EPF), social security (civil service & employee provident fund), Malaysia old age policy, National Policy for Older Persons and the Plan of Action for the Older Persons in 2011. Both the National Policy for Older Persons and the Plan of Action for the Older Persons in 2011trying to support the social well-being of the elderly (Ismail et al., 2015). Nevertheless, as included in young ASEAN members, besides the social pension system, Myanmar also implemented a national social protection strategic plan (Teerawichitchainan & Knodel, 2018). Moreover, In Singapore, central provident funds (CPF) and government family planning had been introduced to overcome poverty among the elderly. As one of the aged countries in ASEAN members, government family planning trying to reduce the family size, therefore eradication of old age poverty can be successfully done (Lee, 2001)(Lee, 1998). Meanwhile, in Thailand, the policy implemented is quite different. Focusing on the eradication policy in Thailand, viable policies had been implemented like the social security fund, national pension system, and government pension scheme. Turning to the social security fund, employees must contribute 5% of their wages to the funds which will use for the selected elderly fund (Suwanrada, 2009). In Vietnam, the elderly aged eighty-five and above will be given VND 120,000 per month through their social pension scheme.

Despite the implementation of policy, viable programs had been done to eradicate old age poverty among ASEAN countries. Previous research indicates that there are six types of

service programs implemented for old age poverty eradication including medical care, caregiving, financial assistance, financial security, community general care, and community health centers. In terms of medical care services, only Thailand country has done this program by implementing a universal coverage scheme. For this scheme, the user fee is only charged 30 baths per consultation or free for those in exemption categories which are children under 12 years old or elderly at least 60 years old (Coronini-Cronberg et al., 2007). Turning to the caregiving service, Thailand also found that this service is the better alternative to overcome old-age poverty. Turning to financial assistance services, Cambodia, Malaysia, Singapore, and Thailand believe that financial assistance services were the crucial things that cannot be denied in order to eradicate old-age poverty. For instance, public financial management program had been done in Cambodia (Runsinarith, 2012). Furthermore, Malaysia had introducing three services including an old age financial assistance scheme (OAFA), children's remittances, and provide financial education. In OAFA, the poor elderly will be given RM 300 monthly for their survival (Mohd et al., 2014; Ismail et al., 2015). Enough remittances from children will eradicate old-age poverty in Malaysia (Jariah et al., 2012). Moreover, Singapore country had introduced public assistance program by giving financial aid to poor households. Similar to financial assistance given to the Malaysian elderly, Thailand country also gives 200 baht monthly to each elderly poor in their old-age government subsistence allowance program.

Another common in government or community types of services is financial security. In Malaysia, three types of financial security had been implemented, for instance, the social insurance scheme, the federal scheme, and Amanah Ikhtiar Malaysia. Meanwhile, in Thailand, old-age income security was implemented as one of the eradication alternatives. Turning to community general care, five countries including Indonesia, Malaysia, Myanmar, Thailand, and Vietnam also focus on that program. In Indonesia, the core focus is on non-cash food assistance (BPNT), health care and social security agency (BPJS), and *program keluarga harapan* (PKH). In the BPNT program, older adults are being provided with some foods. While health insurance support had been given to the elderly as for the BPJS program. Other than that, PKH had focusing on pregnant women, school children, and severe disabilities (Muis et al., 2020). Contradict to other countries, Malaysia promotes social support and care arrangements for older people who live alone (Evans et al., 2017), and senior citizen activity center social support (Zainuddin et al., 2020). Interestingly, Myanmar focuses on community-based care and long-term care (Teerawichitchainan & Knodel, 2018). In Thailand, the lifelong learning, the home for the aged, and multipurpose center for older persons had been done to eradicate poverty in old age (Suwanrada, 2009). In addition, some social services in terms of supporting health, human, education, and housing were introduced to eradicate old-age poverty in Thailand (Jitramontree & Thayansin, 2013). Furthermore, Vietnam trying to help old-age poverty by implementing informal support for the elderly, especially in terms of sharing food, money, and other goods with Vietnamese households (Evans & Harkness, 2008). However, Philippines is more advanced in giving community health support by presenting telehealth in terms of community health centers. Telehealth is a strategy for closing the gap between senior citizens and medical service providers (Cahapay, 2021).

Table 5

Eradication policy and program for older adults in Southeast Asia (ASEAN)

Types of Policy and Program	Example	Cambodia	Indonesia	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Eradication Policy	Some Policies	1) Pension System/ Social Security System 2) Vision and Financial Sector Development Plan 2001-2010; 3) Financial Sector Strategy 2006-2015	-	1) The National Policy, 2) New Economy Policy, 3) Employee Provident Fund (EPF), 4) Social Security (Civil Service Pension & Employee Provident Fund), 5) Malaysian old age policy, 6) National Policy for Older Persons and the Plan of Action for the Older Persons, 7) Social Pension Scheme	1) National Social Protection Strategic Plan 2) Social Pension Scheme (Knodel & Teerawichitchainan, 2017)	Social pension	1) Central provident funds (CPF) -2 Government Family Planning	1) Social Security Fund 2) National Pension System, 3) Government Pension Funds	Social Pension

Medical Care	Enables persons from lower- and middle-income households to receive subsidies for medical care from participating general practitioners	-	-	-	-	-	-	Available	-
Caregiving	Cooking, laundry, giving money to the elders, cleaning and take care of the elder's bedding	-	-	-	-	-	-	Available	-
Financial Assistance	Monthly or one off financial given to elderly / remittances	Available	-	Available	-	-	Available	Available	-
Financial Security	Social Insurance Scheme, Federal Scheme, Amanah Ikhtiar Malaysia, Old-age Income Security	-	-	-	-	-	-	Available	-
Community	Targets frail older	-	Available	Available	Available	-	-	Available	Available

General Care	person with multiple health and social care needs, supports key need in a holistic and person-centred manner								
Community Health Centres	Provides health screenings and conducts health tests through a general practitioner's	-	-	-	-	Available	-	-	-

Discussion

In addition to providing a wider understanding of current evidence-based knowledge on old-age poverty, we attempted to establish knowledge gaps and make suggestions for future studies in this review, which will be elucidated in the discussion section. This study reviews the previous studies on old-age poverty among ASEAN member countries and analyzes based on the profile of the elderly poor, factors influencing old-age poverty, and eradication policy and programs. The findings of the comparative analysis may be important in assisting the conceptualization of old-age poverty, particularly among ASEAN members, as well as in reviewing and improving eradication policies and programs in Southeast Asia and other countries.

The definition of poverty is critical because it ultimately shapes who the poor are, the prevalence of poverty, and how antipoverty policy and practice interventions are implemented. As this review demonstrates, there is a critical need for more empirical research into the multidimensionality and complexities of old-age poverty. More specifically, future research should incorporate subjective measures of poverty into its definition. While a few of the studies in the review did incorporate self-perceived poverty into their definition, respondent responsiveness was limited, with respondents simply selecting their responses on a predetermined scale.

Several key findings were identified during this review. To begin, there is sufficient evidence to suggest that social pensions and employee pension funds (EPF) have a protective effect on

older people and are associated with better health outcomes in poor older people. Second, the findings on gender and old age poverty indicate that women are more likely to face adverse outcomes. Women, on average, had a higher prevalence of poverty. In comparison to men, women were more likely to be poor, have negative mental health outcomes, and require more support. Thirdly, this review also reveals that mostly old-age poverty happens in rural regions. Fourthly, some researchers also found that caregiving was one of the paramount strategies to eradicate old age poverty (Caffrey, 1992a; Caffrey, 1992b).

Fifth and lastly, considering the issue of policy or program implemented to eradicate old-age poverty, there are viable issues and challenges encountered and need future adjustment. For instance, the government needs to expand the scope of its policy recipients (Muis et al., 2020), improved the provision of health services in aging rural communities (Utomo et al., 2018; Mohd et al., 2014), strengthen rural-rural connections (Mohd et al., 2014), integrated social protection strategies must take into account the formal and informal support (Ismail et al., 2015), the government needs to review the old age assistant program (Vaghefi et al., 2016) and also raising the retirement age (Vaghefi et al., 2016).

In terms of the old-age poverty profile, all the countries believe that female elderly are more at risk to become poor compared to elderly males. As gender was one of the paramount profiles to describe old-age poverty, therefore, all the countries must aware of this gender. Consistent with the previous research, mostly elderly poor are age 60 and above, most countries reveal that low education level becoming one of the crucial profiles of the elderly poor. Furthermore, most countries indicate that the elderly poor have poor health and stay in rural areas. The trends of physical disabilities in Myanmar indicate that the intense need for long-term care (LTC) might well arise in the future as the aging population continues to rise (Knodel & Teerawichitchainan, 2017).

In accordance with a perspective that modernization encourages alone living among the elderly, the rise in one-person households is most noticeable in Singapore and Thailand, where the economy is the most developed. While solo living is strongly associated with negative outcomes in old-age wellbeing in ageing countries such as Vietnam, Indonesia, and Malaysia and also young countries including Myanmar, it is much less so in Singapore and Thailand, where strong negative effects are only evident for the encountered need for basic amenities and the wealth measure predicated on household belongings and quality of housing.

Just a tiny portion of childless Singapore and Thai elders who live alone experience significantly higher subjective financial stress and psychological distress than those who live with others. Why are the results for Singapore and Thailand different from those for Vietnam, Indonesia, Malaysia, and Myanmar? Potential reasons involve conceptual change associated with modernization and adaptive processes, such as the provision of substantial remittances by children who migrate. In summary, although we can show exactly that the consequences of having lived in a one-person household for an elderly person differ in Singapore and Thailand versus Myanmar or Vietnam, the reason for the cross-national differences remains unknown (Teerawichitchainan et al., 2015).

There are several limitations to consider when interpreting the findings of this review. To begin, only six databases were searched (Scopus, Science Direct, SAGE, Willey Online, Pub Med, and Google Scholar), which both limited the number of references included in this review

and excluded larger databases (e.g., WoS, Emerald) that may have identified different aspects of old-age poverty. Second, the review only included articles in English, potentially excluding studies in other languages that could contribute more to a multi contextual and dimensional understanding of poverty. Finally, there was a variation in the sample (due to the age of older people, sample size, and focus on a specific region) that makes inter-study comparisons difficult (Kwan & Walsh, 2017).

Conclusion

In summary, we discovered four distinct definitions of old age poverty have been discovered from this review; they were by income and consumption measures, assets or wealth-based measures, self-perceived poverty, and a general category of other measures, which included socioeconomic status, and health status. Common determinants of old age poverty in ASEAN regions include being women, low or no education, chronic medical condition, disability or functional impairment, and staying at rural area. Some policies and programs implemented in ASEAN countries to eradicate old-age poverty were identified, social pension policy, financial development plan, national policy, provident fund, social security policy, financial assistance program, non-cash foods assistance, and community health program. This review contributes to the body of knowledge by identifying the factors associated with old age poverty and social assistance programs available to eradicate poverty in ASEAN countries. We make recommendations for future research in addition to identifying gaps in the literature on old-age poverty. Overall, the findings of this review warn that the movement to eradicate poverty must not overlook an important (and growing) population of older people.

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