Correlation Between Psychosocial Support And Loneliness Among Older Adults In Mathira West Sub-County, Kenya.

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Abstract:
Although many studies across the world and in Kenya have focused on the elderly, limited research has given attention to the correlation between psychosocial support and loneliness in this population. The purpose of this study was to examine the correlation between psychosocial support and loneliness among older adults in Mathira West sub-County, Kenya. Adults aged 55 and above who live in Mathira West sub-county in Kenya were the target population. Cross-sectional research design was adopted. Purposive sampling technique was employed to select 328 participants. Multidimensional Scale of Perceived Social Support (MSPSS) was used to collect data. Descriptive and inferential statistics such as frequencies, percentages, and logistic regression were calculated. Results indicated that psychosocial support and loneliness are correlated. The findings of this study will inform policy formulation and planning in Nyeri County with regards to psychosocial support of the older adults.
Key Words: *Psychosocial Support, Clinical Loneliness, Aging*

I.   Introduction

Higher longevity and increased life expectancy have made aging a dominant phenomenon in the world today and this has led to the rise of elderly population. Acemoglu and Restropo (2017) have estimated that the population of people over 60 years of age will be doubled in the world in 40 years' time. It has been predicted that the ratio of people above 60 years to the rest of the world population which was 11% in 2006 and will reach 22% by 2050 (Lutz & Butz, 2017). According to Granic et al. (2018), the proportion of old adults in developing and developed countries will reach to 80% and 40% by 2050, respectively. The rise among these populations has become a major economic, social and health concern for health care providers, family members and societies in the world today (Bandari et al., 2019).

Sequel to changes in phase of life cycle among older adults such as retirement or age-related losses such as death of a partner or friends, as well as deteriorating health and limited mobility (Kemperman et al., 2019). At the old age, older adults mainly prefer to remain in their own house and live independently, hence; majority of them usually experience feelings of loneliness and social isolation. According to Gardiner et al., (2018), loneliness and social isolation are major problems for older adults and are associated with adverse mental and physical health consequences. A wide range of health consequences associated with loneliness such as depression, cardiovascular disease, quality of life, cognitive function and mortality have been identified (Ernst & Cacioppo, 2019). Suffice to say that the COVID-19 pandemic is increasing the number of older adults who are socially isolated and lonely because of stay-at-home orders and banned visits for aged nursing home residents in many countries in the world (National Academics of Sciences Engineering and Medicine –NASEM, 2020).

A meta-analysis of 70 studies involving 3.5 million individuals found that loneliness increased mortality by 26% in older adults (Hott-Lunstad et al., 2015). Loneliness is found to be associated with a 45% increased risk of death (Hott-Lunstad et al., 2015). Social isolation and loneliness are serious and affect a significant proportion of the older adult population. For instance, in the United States of America, 26% of community-dwelling older adults are considered to be socially isolated and 43% of older adults report feeling lonely (NASEM, 2020). A similar study in US indicated the prevalence of loneliness among older adults in primary care at 20% (Mullen et al., 2019). Additionally, review of prevalence rates of loneliness, anxiety, and depression among older people living in long-term care settings such as residential aged care facilities, nursing homes and assisted living facilities found that the prevalence rates of loneliness were between 56% to 95.5% (Elias, 2018).

Findings from a study among 2,251 older adults in European community-dwelling showed that emotional and social loneliness were reported by 29.2% and 26.7% of the participants respectively and 13.6% of the participants experienced both emotional and social loneliness simultaneously (Fierloos et al., 2021). Similarly, a prevalence study and predictors of general psychiatric disorders and loneliness during COVID-19 among older adults in United Kingdom showed that 35.86% of the respondents reported loneliness (Li & Wang, 2020). Also, research on predictors of loneliness and different types of social isolation among rural-living older adults in the United Kingdom revealed a prevalence of loneliness at 13%, isolation from the family at 49% and isolation from the community at 9% respectively among this population (de Koning et al., 2017).

Statistics of loneliness among older adults in Asian countries is not far from the rest of the world. For example, a study among 744 older adults recruited from 13 primary care clinics in Wuhan, China showed a prevalence of loneliness among this population at 26.2% (Zhong et al, 2018). Also, in a correlates of social support and loneliness among Chinese industry workers found a prevalence of loneliness at 18.3% (Zhong et al., 2016). In addition, Metz (2021) reports that 28.7% of older adults who participated in a study in Singapore were severely feeling lonely and 34.9% of the participants were moderately feeling lonely.

African older adults are not exempted from the perennial phenomenon of loneliness. A cross sectional study among selected older adults in South Africa indicated that the prevalence of self-reported feelings of loneliness and reduced interest in most things was at 43.8% (Hao et al., 2017). A study on peer-to-peer support model to improve quality of life among highly vulnerable, low-income older adults in Cape-Town, South Africa found that 39.6% of the participants were severely lonely (Geffen et al., 2019). A similar cross-sectional study on prevalence of loneliness and association with depressive and anxiety among retirees in Northcentral Nigeria by Igbokwe et al., (2020) found the prevalence of loneliness at 21.8%. These statistics are much less, compared to existing data on loneliness in East African countries. For instance, in a qualitative data to examine the social, economic and demographic risk factors of loneliness among 605 older persons in Uganda, the study found that 7 in 10 older adults felt lonely which translates into 70% prevalence of loneliness (Nzabona et al., 2015).

Psychosocial support has been linked to lower loneliness among older adults. Higher support received from four relational sources such as spouse/partner, children, family, and friends were associated with reduced loneliness and improved well-being. Chen and Feeley et al. (2014) from a health and retirement study among 7,367 older adults, the findings from the study showed that support from spouse/partner and friends alleviated loneliness while strain from support systems intensified loneliness. Therefore, various forms of support have significant impact on loneliness and well-being of older adults. Psychosocial support from family members, friends and neighbours is very significant for the well-being of the older adults and to mitigate loneliness among the population (Xie et al., 2016).

An empirical investigation explored the impact of perceived stress, social support on mental health conditions such as fatigue, loneliness, and depression of the 163 older adults. Structural equation modelling was performed to assess the impact. The findings indicate that perceived stress has an impact on higher levels of depression, whereas, reduced psychosocial support have impact on lower levels of loneliness on older adults (Kwag et al., 2011). This implies that social support and physical activity mediated the relationships between stress and mental health. Also, a similar study on impact of psychosocial support on loneliness among 110 older Portuguese gay men using UCLA Loneliness Scale. Findings from the study showed that there was a significant impact of low levels of family support, friends support and connectedness to the community on high levels of loneliness in the regression analyses.

A meta-analysis investigated the effectiveness of psychosocial intervention for the promotion of mental health among older adults. The studies were divided into physical exercise, skill training, reminiscence, social activities, psychosocial group support and multicomponent interventions. Results from the analysis indicated that the impact of psychosocial interventions on positive effect of life, reduced loneliness and positive mental health is significant. Also, psychosocial activities significantly improved positive mental health, life satisfaction and quality of life and reduced depressive symptoms (Forsman et al., 2011). Another study by Kang et al. (2018) on the impact of perceived social support, loneliness, and physical activity on quality of life in South Korean older adults showed that perceived social support had a significantly positive impact on physical activity and decreasing loneliness. More so, perceived social support mediated between relationship between loneliness and quality of life.

II.   Materials and Methods

Loneliness is a serious major concern among older adults. Research has found that older adults with feelings of loneliness are at risk for a range of negative physical and mental health outcomes such as high blood pressure, depression, dementia and early mortality (Luke, 2020). More so, loneliness among older adults have become intensified sequel to the COVID-19 pandemic (Polenick et al., 2021). Psychosocial support has been found to be effective in reducing the severity of loneliness among older adults' population. However, despite the

critical impact of psychosocial support on loneliness among this population, little or no study is known about this phenomenon in Kenya.

A number of studies have been done to investigate the role of psychosocial support from family, friends, neighbours and religious group members. For example, in a study using data from the 2004 Malaysian population and family survey, found that social support from family and friends alleviates loneliness among older people (Teh et al., 2014). Similar study in South Africa among 1,071 participants on the association between the experience of loneliness and the emotional closeness older persons have in their social relationships with their children, friends, and spouses. Findings from the study indicate the significant impact of psychosocial relationships and emotional closeness with older adults on their loneliness. The replicability of the study on impact of psychosocial support to mitigate loneliness among older adults is needed in East African countries especially in Kenya where little or no study has been done among older adults who feel lonely because of their late adulthood vulnerability.

Therefore, this study investigated the correlation between psychosocial support and loneliness among older adults in Mathira West Sub-county, Kenya. Findings from this study will inform advocate for psychosocial support as prime need for this population from the government, children, spouses, friends and members from religious organizations.

Objective of the study

The objective of this study was to establish whether there exists a correlation between psychosocial support and loneliness among older adults in Mathira West Sub-County, Kenya.

Hypotheses

H_0: There is no significant difference between lonely older adults with no psychosocial support and older adults who experience psychosocial support.

H_a: There is a significant difference between lonely older adults with no psychosocial support and older adults who experience psychosocial support.

METHODS

This study is a cross-sectional research design to investigate the prevalence and associated risk factors of loneliness among the older adults in Mathira West Sub-County, Kenya. This study sampled 299 older adults using Yamane's formula to calculate the sample size, considering the confidence level of 95%, the margin error of 5%, and the 1169 population. Data was collected from 299 older adults aged 55-60 years using quantitative approach, male N = 174 (58.2%), and female N =125 (41.8%).

The MSPSS a short instrument designed to assess an individual's subjective feelings and perception of support from family, friends and significant individuals in older adults, was used to collect data from the respondents in this study. The amount of social support is rated on a seven-point Likert scale with responses ranging from very strongly disagree (=1) to very strongly agree (=7). The questionnaire measures the three aspects of perceived social support namely, the Significant Other Support; sum across items 1, 2, 5, and 10, then divide by 4; Family Support: sum across items 3, 4, 8, and 11, then divide by 4; the third subscale measures Friends Support: sum across items 6, 7, 9, and 12, then divide by 4 to get the mean. The subscale that the respondent scores highly represent the highest support he/she receives.

Certain ethical issues were considered such as ethical clearance from Institute of Youth Studies, Tangaza University College, Kenya and research permit from the National Commission for Science, Technology and Innovation (NACOSTI) to enable collection of data from the older adults living in Mathira West Sub-county, Kenya. The prospective respondents were informed about the procedure of the study, confidentiality, benefits, personal risks and freedom to participate or withdraw before embarking on data collection; thus, data was collected from only the respondents that consented to participate in the study.

III. RESULTS

Socio-Demographic Information

The socio-demographic information obtained from the respondents included their age, gender, level of education, religion affiliation, marital status, employment status, financial status, living condition and frequency of using mobile phone to communicate. The frequency of all the socio-demographic characteristics is presented in subsequent Tables.

Table 1. Distribution of Key Socio-demographic Characteristics

Variables	Frequency	Percent	
Respondent's Age			
55-60 years	85	28.4	
61-65 years	55	18.4	
66-70 years	48	16.1	
71-75 years	56	18.7	
76-80 years	55	18.4	
Total	**299**	**100.0**	
Respondent's Gender			
Male	174	58.2	
Female	125	41.8	
Total	**299**	**100.0**	
Respondent's Levels of Education			
No formal education	87	29.1	
Primary	44	14.7	
High school	30	10.0	
Diploma/certificate	50	16.7	
Bachelor degree	73	24.4	
Master's degree	13	4.3	
PhD	2	0.7	
Total	**299**	**100.0**	

Table 1 presents the distribution of key socio-demographic characteristics among the respondents in this study. Age distribution, for example, the higher frequency was among the respondents aged 55-60 years (85, 28.4%) compared to aged 61-65 years (55, 18.4%), 66-70 years (48, 16.1%), 71-75 years (56. 18.7%) and 76-80 years (55, 18.4%). This suggests that the higher percentage of older adults in this study were adults in 55-60 years' age bracket.

Further, frequency of gender distribution in this study indicated that the frequency of male respondents was slightly higher (174, 58.2%) as opposed to female counterpart (125, 41.8%). It will therefore be in order to infer that the majority in this study were male older adults. Additionally, the Table 1 shows the distribution of educational status of the respondents. Majority of the respondents had no formal education (87, 29.1%). Whereas, the frequency of the respondents with bachelor degree was similarly higher (73, 24.4%) compared to primary level of education (44, 14.7%), High school certificate (30, 10%), Diploma/certificate (50, 16.7%), Master's degree holders (13, 4.3%) and PhD holders (2, 0.7%).

Table 2. Distribution of other Socio-demographic Characteristics

Variables	Frequency	Percent
Respondent's Religion Affiliation		
Catholics	75	25.1
Pentecostal	105	35.1
Protestant/Evangelical	99	32.4
Muslim	22	7.4
Total	**299**	**100.0**
Respondent's Marital Status		
Married	68	22.7
Single parents	114	38.1
Separated/Divorcee	44	14.7
Widow/widower	73	24.4
Total	**299**	**100.0**
Respondent's Employment Status		
Retired	103	34.4
Still in work force	90	30.1
Self-employed	29	9.7
Trading/Business	77	25.8
Total	**299**	**100.0**
Respondent's Financial Status		
Poor	74	24.7
Average	202	67.6
Affluence	23	7.7
Total	**299**	**100**

Respondent's Living Condition		
I live alone	174	58.2
I live with spouse	59	19.7
I live with family	66	22.1
Total	**299**	**100**
Phone Used to Communicate		
Frequently	137	45.8
Very rarely	162	54.2
Total	**299**	**100**

Table 2 represents the distribution of other socio-demographic characteristics among the respondents in this study. With regard to religion affiliation of the respondents, the frequency of Pentecostal was higher (105, 35.1%) compared to members of the Catholics (75, 25.1%), Protestant/Evangelical (99, 32.4%), and Muslim (22, 7.4%). This data shows that the majority of the respondents in this study were members of the Pentecostal Churches.

Similarly, concerning the respondent's marital status, the higher percentage of the respondents were single parents (114, 38.1%) as opposed to those who were married (68, 22.7%), separated or divorced (44, 14.7%) and those who were either widow or widower (73, 24.4%). However, this study found that the majority of the respondents were single parents. Also, as regards the employment status of the respondents, the frequency of retired were significantly higher (103, 34.4%) as against those who are still in workforce (90, 30.1%), self-employed (29, 9.7%) and trading/business (77, 25.8%). The implication of this finding indicated that many of the respondents in this study were retirees.

Meanwhile, the financial status of the respondents shows that the majority of the respondents disclosed to be of average financial stability (202, 67.6%) compared to those who considered themselves to be poor (74, 24.7%) and self-acclaimed affluence (23, 7.7%). In this study, therefore, higher frequency of self-acclaimed financial status of the respondents was average financial status. Additionally, the living condition of the respondents indicated that the frequency of those who live alone was higher significantly (174, 58.2%) as opposed to those who live with family (66, 22.1%) and those who live with spouse (59, 19.7%). This implies that significant number of the respondents in this study live alone. Likewise, in reference with the use of mobile phone to communicate, the frequency of the respondents who very rarely use mobile phone to communicate to communicate was higher (162, 54.2%), as against those who frequently use mobile phone to communicate (137, 45.8%). Therefore, frequency of use of mobile phone to communicate was a variable to be considered in this study as majority of the respondents very rarely use the mobile phone to communicate.

Correlation between Psychosocial Support and Loneliness among Older Adults

This study sought to investigate the correlation that exists between psychosocial support and loneliness among older adults. Concerning the psychosocial support, the MSPSS a short instrument designed to assess an individual's subjective feelings and perception of support from family, friends and significant individuals in older adults, was used to collect data from the respondents in this study. The amount of social support is rated on a seven-point Likert scale with responses ranging from very strongly disagree (=1) to very strongly agree (=7). The questionnaire measures the three aspects of perceived social support namely, the Significant Other Support; sum across items 1, 2, 5, and 10, then divide by 4; Family Support: sum across items 3, 4, 8, and 11, then divide by 4; the third subscale measures Friends Support: sum across items 6, 7, 9, and 12, then divide by 4 to get the mean. The subscale that the respondent scores highly represent the highest support he/she receives. The Table below represents the frequency of psychosocial support subscales among the respondents.

Table 3. The Proportion of Social Support among the Respondents

Classification of Perceived Social Support	**Frequency**	**Percent**
Significant other support	55	18.4
Family Support	185	61.9
Friends Support	59	19.7
Total	**299**	**100**

Table 3 presents the frequency of social support subscales among the respondents. As indicated, the frequency of family support was significantly higher (185, 61.9%) compared to support from significant others (55, 18.4%) and support from friends (59, 19.7%). This finding showed that older adults received more support significantly from the family compared to support from friends and significant others.

Additionally, the Multidimensional Scale for Perceived Social Support (MSPSS) also was designed to assess an individual's subjective feelings associated with social support the individual received from significant

others, family and friends. This is done by calculating the cumulative scores that ranges from 12 to 84. The mean scores are gotten by dividing total aggregate by 12. A mean score of 1 to 2.9 is considered low feeling of support, 3 to 5 indicates moderate feeling of support and 5.1 to 7 high feelings of support. The scores are interpreted as, the higher the score, the greater the feelings emanated from amount of available social support (Dambi et al., 2018). Table 4 shows the frequency of severity of psychosocial support.

Table 4. The Proportion of Psychological Support among the Respondents

Frequency of Psychosocial Support	Frequency	Percent
Less than 2.9: Low feelings from social support	11	3.7
3.0-5.0: Moderate feelings from social support	166	55.5
5.1-7.0: High feelings from social support	122	40.8
Total	**299**	**100**

Table 4 shows levels of psychosocial support among the respondents. The Table shows the levels of feeling associated with three subscales of social support namely; support from significant others, family support and support from friends. As indicated, the frequency of moderate feelings of social support was higher (166, 55.5%) compared to high feelings (122, 40.8%) and low feelings of social support (11, 3.7%). This is interpreted that the higher the score, the greater the feelings emanated from amount of available social support. This is represented in table 5 below.

Table 5. Fisher's Test for the Association between Feelings and Social Support

Severity of Psychosocial Support	Total	Severity of Loneliness			Exact Test	
		No/low	moderate	clinical	value	Sig.
Low feelings of social support	11(3.7)	1(0.3)	10(3.3)	0 (0.0)	58.859	.000
Moderate feelings social support	166(55.5)	80(26.8)	45(15.1)	41(13.7)		
High feeling of social support	122(40.8)	93(31.1)	27(9.0)	2(0.7)		

Table 5 shows the Fisher's Exact test. This statistical model is used to determine if the proportions of categories in two group variables such as severity of loneliness and levels of psychosocial support significantly differ from each other. This test determines whether or not there is a significant association between two categorical variables. As indicated in the Table, the respondents who had low feelings of social support (3.7%) was shown to exhibit moderate level of loneliness (3.3%), and older adults who display moderate feelings of psychosocial support (55.5%), equally display low or no loneliness (26.8%). Likewise, the respondents who demonstrated high feelings of social support (40.8) similarly demonstrated No/low loneliness (31.1%). The Fisher's Exact analysis of contingency indicated that there was a significant linear association between psychosocial support and severity of loneliness among the older adults (p=0.000). The implication of these results showed that the higher social support is associated with low or no loneliness, and that lower social support is related to moderate or clinical loneliness.
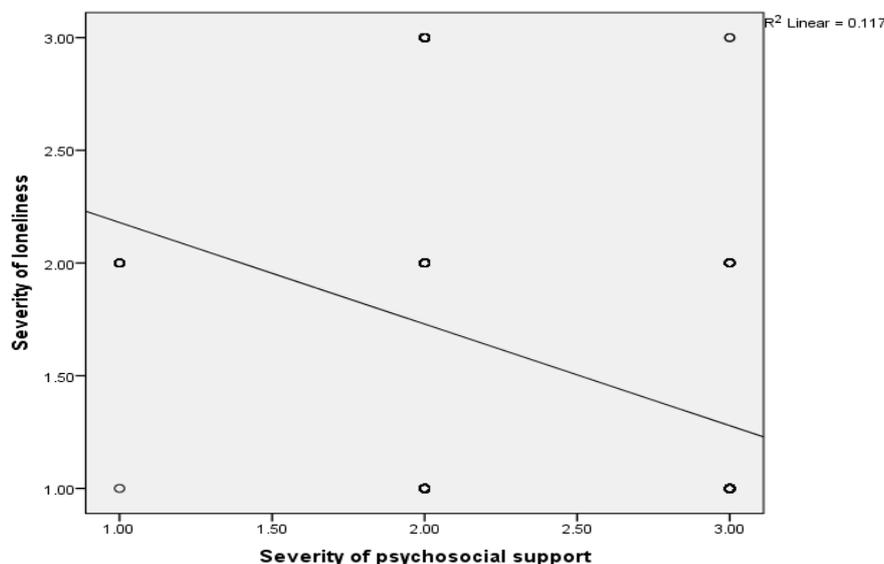

Figure 1. Scatter plot for Association between Psychosocial Support and Loneliness

Figure 1 represents the analysis of contingency demonstrating a significant linear relationship between psychosocial support and severity of loneliness among the older adults in the dataset. It represents data points on a two-dimensional Cartesian system.

Table 6. Correlation between Psychosocial Support, Loneliness and Sociodemographic Characteristics

	Age	Gender	Edu	Rel	Mar	Empl	Fin	Liv.Co	Phone	Alone	Support
Age	-										
Gender	158**	-									
Edu	-314**	-002	-								
Rel	.194**	-409**	-.147	-							
Mar	.205**	.012	.021	.227**	-						
Empl.	-238**	.129*	.192**	-392**	-508**	-					
Fin.	-207**	-358**	.331**	.382**	.106	-002	-				
Lin.Co	.606**	.125*	.010	.004	.169**	-131*	.072	-			
Phone	.158**	.085	-233**	.009	.283**	.032	.020	.160**	-		
Alone	-308**	-290**	.128*	.075	.322**	-205**	-104	-365**	-184**	-	
support	-004	.056	-.005	-117*	-.090	.374**	.299**	.177**	.192**	-342*	-

**correlation is significant at the 0.01 level (2-tailed)
*correlation is significant at the 0.05 level (2-tailed)

Table 6 represents the correlation statistics showing the relationship between sociodemographic characteristics, psychosocial support and clinical loneliness. Pearson correlation coefficient, bivariate correlation was used to analyse and measure the linear correlation between two sets of data. As indicated in the Table, there was a strong linear correlation within-groups of social demographic characteristics at 0.01 levels, 2 tailed. (Ps<0.5). Meanwhile, negative correlation was reported between loneliness and age (r = -.308; p = 0.01). Negative correlation implies that the two variables moves in opposite direction. This means that the relationship between loneliness and age is negative in sense that an increase in one variable is associated with a decrease in other. It implies that as the older adults increase in age, level of loneliness decreases. Similarly, a strong correlation coefficient exists between gender and loneliness (r = -.290; p = 0.01). This means that a strong relationship between gender and levels of loneliness among older adults.

Further, the correlations indicate a weak positive correlation between levels of education and loneliness (r =.128; p=0.05). Positive correlation implies that the two variable move in the same direction, meaning that when the value of one variable increases, the value of other variable also increases. In this case, it means the increase in levels of education, the severity of loneliness also increases. However, it should be noted that the significance in this result is weak. This means that although both variables tend to go up in response to one another, the relationship is not very strong; hence, the inferential statement should be with caution. Likewise, a strong positive correlation coefficient exists between marital status of the older adults and severity of loneliness (r =.322; p =0.01). Strong positive correlation implies a strong connection between marital status and loneliness.

In addition, this study found a negative correlation coefficient between employment status and severity of loneliness (r = -.205; p =0.05). Also, negative correlation between living condition of the older adults and severity of loneliness (r = -.365; p = 0.01) and between frequency of use of phone to communicate and severity of loneliness (r = -.184; p = 0.01). These negative correlations showed that the variables move in opposite direction.

Nevertheless, the correlation Table shows a weak negative correlation between perceived psychosocial support and religion affiliation of the older adults (r = -.117; p = 0.05). This implies that both variables move in opposite direction but the strength of relationship is very weak. In addition to these, this study found a strong positive correlation coefficient between perceived psychosocial support and employment status (r = .374; p =0.01). This means that when the level of employment increases, the psychosocial support also increases. Also, positive correlation exists between financial status of the older adults and perceived psychosocial support (r = .299; p = 0.01). The implication of this finding is that the increased financial status of the older adults attracts increased perceived psychosocial support. Likewise, a positive correlation shows between living condition and perceived psychosocial support (r = .177; p = 0.01). This implies that an increase in financial status of the respondents, correlates with increase perceived psychosocial support. Equally, strong positive correlation coefficient exits between the use of phone to communicate and perceived psychosocial support (r = 192; p = 0.01). This also means that the higher the frequency in using phone to communicate, the higher the perceived psychosocial support the individual receives.

The correlation results reveal weak negative correlation coefficient between perceived psychosocial support and severity of loneliness (r = -.342; p = 0.05). Negative correlation between these variables means that

they have an inverse relationship, implying that as severity of loneliness increases, perceived psychosocial support decreases. The implication of weak negative correlation in this study is that as severity of loneliness increases, the perceived psychosocial support tends to decrease, but in a weak or unreliable manner.

Table 7. Binary Logistic Regression showing Adjusted Odd Ratio of Psychosocial Support and Clinical Loneliness

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1ᵃ	MSPSrecoded			28.428	2	.000			
	Low support (1)	3.468	1.070	10.501	1	.001	32.069	3.937	261.219
	High support(2)	1.238	.263	22.082	1	.000	3.447	2.057	5.777
	Constant	-1.165	.213	30.019	1	.000	.312		
a. Variable(s) entered on step 1: MSPSrecoded.									

Table 7 demonstrates the binary logistic regression showing the Adjusted Odd Ratio (AOR) of psychosocial support and clinical loneliness among the older adults. Binary regression adjusted odds ratios is a method used to fit a regression model, which has been adjusted to account for other predictor variables in a model to predict the ratio effect of the relationship between a primary predictor variable and a dichotomous categorical outcome variable. Logistic regression generates adjusted odds ratios with 95% confidence intervals. As indicated on the Table 7, respondents who had low support (AOR: 32.94; 95% CI: 3.937 – 261.219) are at 32.94 odd ratio likelihood to exhibit clinical loneliness. Similarly, respondents who got high perceived psychosocial support are less likely to manifest clinical loneliness (AOR: 3.447; 95% CI: 2.057 – 5.777). This means that respondents with high psychosocial support are 3.447 odd ratio likelihood to exhibit clinical loneliness. Finding from this model implied that the lesser the psychosocial support, the higher the likelihood to develop clinical loneliness.

Table 8. Frequency of Loneliness Borderline

Variables	Frequency	Percent
No/low loneliness	174	58.2
Loneliness borderline cut off points	125	41.8

Table 8 presents the distribution of loneliness borderline among the respondents.

Respondents who scored 0-28 were classified to present no or low loneliness whereas the respondents who scored from 29 and above were classified as the cut-off point at borderline for loneliness. As indicated on the Table, the frequency of no or low loneliness was higher at 58.2%.

Whereas, 41.8% of the respondents who scored 19 points and above were presenting with loneliness at borderline.

Table 9. ANOVA test for loneliness and psychosocial support

			Sum of Squares	df	Mean Square	F	Sig.
Between Groups	(Combined)		10.324	1	10.324	37.638	.000
	Linear Term	Unweighted	10.324	1	10.324	37.638	.000
		Weighted	10.324	1	10.324	37.638	.000
Within Groups			81.468	297	.274		
Total			**91.793**	**298**			

Table 9 presents the result of the ANOVA testing whether there was a significant difference in the mean of lonely adults with no psychosocial support and older adults who experience psychosocial support Analysis of variance (ANOVA) was used to assess the systematic factors of loneliness and random factors of psychosocial support. This test was to examine where there was a significant difference between systematic and random factors among the respondents who receive random factors of psychosocial support and those who do not in relation with loneliness. Result from the ANOVA test implies that there was a significant difference (p=0.000) hereby reject the null hypothesis and accepts the alternative hypothesis. This implies that psychosocial support is determinant of loneliness among the older adults.

IV. DISCUSSION

This study sought to investigate the correlation that exists between psychosocial support and loneliness among older adults. Results from this study showed that the frequency of family support was significantly higher

(185, 61.9%) compared to support from significant others (55, 18.4%) and support from friends (59, 19.7%). This finding showed that older adults received more support significantly from the family compared to support from friends and significant others. These results match up with results from a study on the role of the family, friends and significant others in providing social support and enhancing quality of life in cancer patients, where it was reported that significant majority of the patients receive more of family support as opposed to other sources of social support (Banovcinova & Basková, 2016).

Results from Fisher's Exact Test in this current study showed that the respondents who had low feelings of social support (3.7%) was shown to exhibit moderate level of loneliness (3.3%), and older adults who display moderate feelings of psychosocial support (55.5%), equally display low or no loneliness (26.8%). Likewise, the respondents who demonstrated high feelings of social support (40.8) similarly demonstrated No/low loneliness (31.1%). The Fisher's Exact analysis of contingency indicated that there was a significant linear association between psychosocial support and severity of loneliness among the older adults (p=0.000). Findings from this study are consistent with available data, where it was shown that higher self-rated social support was associated with higher life satisfaction and that loneliness was associated with lower perceived psychosocial support. The same study found that social support and positive social relationships are protective factors of lower psychological wellbeing, hereby noted that high levels of social support from friends and family are less likely to be lonely (Dahal, Kahana, Bhatta, & Ermoshhkina, 2021).

Likewise, this current study found weak negative correlation coefficient between perceived psychosocial support and severity of loneliness (r = -.342; p = 0.05). In other words, an inverse relationship exists to imply that as severity of loneliness increases, perceived psychosocial support decreases. This finding is consistent with a study on social support and sense of loneliness in solitary older adults, whereby showed that poor mental health status, financial inadequacy and weak social support networks were significantly associated with the sense of loneliness, with social support being the most prominent risk factor (Bai, Yang, Wang, & Knapp, 2017). Also, result from the current research is in resemblance with findings from a study by Chen and Feeley (2014), which revealed that higher psychosocial support from all social networks correlates with reduced loneliness. This seems to imply that the higher support older adults receive, the lower the feelings of loneliness.

Similarly, data from this present study showed that the respondents who had low support (AOR: 32.94; 95% CI: 3.937 – 261.219) are at 32.94 odd ratio likelihood to exhibit clinical loneliness. Similarly, respondents who got high perceived psychosocial support are less likely to manifest clinical loneliness (AOR: 3.447; 95% CI: 2.057 – 5.777). Finding from this model implied that the lesser the psychosocial support, the higher the likelihood to develop clinical loneliness. This is comparably alike with a study, which suggest that integration into social support networks and improving relationship quality will significantly reduce the intensity of loneliness among the older adults (Santini et al., 2019). Also, study on relationship between psychosocial support and loneliness concurs with finding of the current study, where it was revealed that low level of psychosocial support correlates with severe levels of loneliness among older adults (Siconolfi et al., 2013).

V. CONCLUSION

This study investigated the correlation between psychosocial support and loneliness among older adults in Mathira West Sub-County, Kenya. The study used quantitative approach in research and employed a correlational design to determine the relationship between the study variables. Data was collected using a researcher-generated socio-demographic questionnaire, MSPSS, and UCLA Loneliness Scale. Out of the 330 questionnaires, 299 questionnaires were returned for data analysis. The respondent's age ranges from 55 -80 years, with higher levels of aged 55-60 years and majority of the respondents were male.

This study sought answers to three research questions. The first research question: What are the levels of loneliness among the older adults in Mathira West Sub-county, Kenya? This study found the levels of moderate loneliness at 27.4% and the levels of clinical loneliness at 14.4%. The second research question: What are the risk factors of loneliness among the older adults in Mathira West Sub-county, Kenya? Findings in this study state that respondents aged 66-70 years (p=0.000; 95% CI: -21.957 – 8.151) and aged 71-75 years (p=0.000; 95% CI: 10.590 -23.755) were found to be at risk of clinical loneliness. Also, this study found that being male was found to be at risk of clinical loneliness (p=0.000; 95%CI: 6.760 – 11.523). Similarly, older adults who were separated or divorced were at risk of clinical loneliness (p = 0.000; 95% CI: -22.232 - -7.833). These findings indicated that single parents, separated or divorced older adults are likely to exhibit clinical loneliness. Also, data from this study indicated that respondents who were self-acclaimed financially poor were at risk of exhibiting clinical loneliness (p=0.041; 95% CI: -14.363 – 13.986). Additionally, data from this study showed that the respondents who use mobile phone frequently were at risk of clinical loneliness (p=0.000; 95% CI: 5.350 -13.738). This can be interpreted that the frequent the older adults use mobile phone to communicate, the implication of clinical loneliness. Moreover, this current study found weak negative correlation coefficient between perceived psychosocial support and severity of loneliness (r = -.342; p = 0.05). Similarly, data from this present study showed

that the respondents who had low support (AOR: 32.94; 95% CI: 3.937 – 261.219). Finding from this model implied that the lesser the psychosocial support, the higher the likelihood to develop loneliness.

Declaration of Conflict of Interest

The authors hereby declare no conflict of interest associated with this study.

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