

Social Engagement and Partner Support as Associations of Stress among the Elderly: Implications for Community Nursing Practice

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ABSTRACT

Background: Psychological stress is common among older adults because of declining social participation and reduced emotional support. Although social engagement and spousal support are recognized as important psychosocial resources, evidence regarding their combined influence on stress among community-dwelling older adults in rural settings remains limited. This study addresses this gap by examining these relationships in a rural Indonesian community. **Objectives:** To examine the associations of social engagement and spousal support with stress levels among the elderly in Sombano Village, Indonesia, and to determine their combined contribution to stress. **Methods:** A community-based cross-sectional study was conducted among 100 older adults aged ≥ 60 years selected using purposive sampling. Social engagement was assessed using the Social Engagement and Activities Questionnaire (SEAQ), perceived stress was measured using the Perceived Stress Scale (PSS-10), and spousal support was evaluated using the Spousal Support Scale among participants with a living spouse. Data were analyzed using Spearman's rho correlation and multiple linear regression. Statistical significance was set at $p < 0.05$. **Results:** Social engagement was negatively correlated with stress ($r_s = -0.642, p < 0.001$), and spousal support also showed a significant negative correlation with stress ($r_s = -0.587, p < 0.001$). Multiple linear regression demonstrated that the overall model was statistically significant ($F(2,97) = 67.98, p < 0.001$), explaining 58.4% of the variance in stress levels ($R^2 = 0.584$; adjusted $R^2 = 0.575$). Social engagement emerged as the stronger predictor of stress ($\beta = -0.428, 95\% \text{ CI: } -0.66 \text{ to } -0.19$), followed by spousal support ($\beta = -0.337, 95\% \text{ CI: } -0.56 \text{ to } -0.11$). **Conclusion:** Greater social engagement and stronger spousal support were independently associated with lower stress levels among community-dwelling older adults. These findings support the integration of psychosocial health promotion, particularly strategies that encourage social participation and strengthen family support, into community nursing practice to promote healthy aging and psychological well-being.

Keywords: Community Nursing; Elderly; Partner Support; Social Engagement; Stress

INTRODUCTION

Aging is an inevitable process experienced by every human being. As individuals enter the elderly stage, they undergo various physical, psychological, and social changes that often lead to vulnerability, stress, and frustration (Raeisvandi *et al.*, 2023). These changes are usually accompanied by a decline in daily activity due to retirement, physical limitations, reduced income, loneliness caused by the loss of a spouse or separation from children, and diminished social roles (Javadzade *et al.*, 2024). Such complex transitions make older adults more susceptible to psychological distress and a decline in overall quality of life.

According to the World Health Organization (WHO, 2024), the global elderly population has been increasing significantly, leading to heightened concern regarding mental health conditions among older adults. In Indonesia, the number of individuals aged ≥ 60 years is steadily rising, contributing to a growing

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proportion of elderly populations in various provinces, including Southeast Sulawesi and Wakatobi Regency. Along with aging, many elderly individuals face stress due to physical limitations, declining social roles, chronic illness, and emotional adjustment challenges. These conditions emphasize the need to identify psychosocial protective factors that help reduce stress and improve quality of life among older adults. Older adults generally experience a gradual decline in both physical and psychological functions. Psychosocial problems such as stress, anxiety, and depression often emerge as a result of these changes (Peng & Roth, 2025).

Stress is one of the most common mental health problems among the elderly, potentially affecting functional ability, independence, and overall well-being (Raeisvandi *et al.*, 2023). Stress arises as a psychological response to various pressures or stressors that demand adaptive coping with life changes, such as chronic illness, social isolation, or the loss of a spouse. The inability to adapt effectively may lead to prolonged stress and a decline in mental health. In Sombano Village, Kaledupa District, data from 2024 recorded a total of 120 elderly residents. Most of them exhibited symptoms of stress resulting from declining physical conditions (such as visual and hearing impairments), psychological issues due to the loss of loved ones, and social isolation stemming from reduced interactions with their surroundings. Observable symptoms included irritability, emotional instability, feelings of worthlessness, loss of enthusiasm for life, and decreased motivation to engage in activities. These conditions exacerbate stress levels and negatively impact elderly health (Ferrando *et al.*, 2025).

Nevertheless, some elderly individuals in Sombano Village remain active in various social activities, including elderly exercise programs, morning walks, weekly religious gatherings, and community service events. Such social engagement serves as a protective factor that fosters a sense of belonging, emotional support, and life satisfaction. Moreover, the presence of a spouse contributes to emotional stability, comfort, and psychological support, helping the elderly cope with stress and adapt to life transitions (Swoboda *et al.*, 2025). Despite the growing elderly population, stress management among older adults, particularly in rural communities, remains insufficiently addressed (Hogan *et al.*, 2025). Many older adults experience reduced social interaction and limited emotional support (Ramírez-Morros *et al.*, 2024), especially following the loss of a spouse, increasing their vulnerability to psychological stress (Naganandini, 2025).

Previous studies have primarily examined social engagement or family support separately and have largely been conducted in clinical or urban settings (Zaguri-Greener *et al.*, 2025), providing limited evidence regarding their combined influence on stress among community-dwelling older adults in rural areas (Kagwa *et al.*, 2025). Consequently, evidence supporting culturally appropriate community nursing interventions for rural elderly populations remains limited (Koly *et al.*, 2025).

The novelty of this study lies in its simultaneous examination of social engagement and spousal support as complementary psychosocial protective factors associated with stress among older adults living in a rural Indonesian community. By focusing on a village-based population, this study provides context-specific evidence to support the development of culturally relevant community nursing strategies aimed at promoting healthy aging and psychological well-being. Therefore, this study aimed to examine the associations between social engagement, spousal support, and stress levels among older adults in Sombano Village, Indonesia.

METHODOLOGY

Study Design

This study employed a quantitative approach with a descriptive correlational design to analyze the relationship between social involvement and spousal support with stress levels among the elderly in Sombano Village, Kaledupa District, Wakatobi Regency (Telaumbanua *et al.*, 2024). The correlational design was selected because it allows for an examination of the relationship between two or more variables without direct intervention or manipulation of those variables, making it appropriate for community-based research where experimental manipulation is neither feasible nor ethical.

The research utilized a cross-sectional approach, wherein data collection was conducted at a single point in time. This approach enables the researcher to assess the relationship between social involvement,

spousal support, and stress levels simultaneously within the real-life context of the community. While cross-sectional designs do not allow for causal inference, they are well-suited for identifying associations and generating hypotheses for future longitudinal investigations.

The population of this study consisted of all elderly individuals residing in Sombano Village. Based on data obtained from the village office in 2024, there were 120 elderly residents aged ≥ 60 years. Following screening according to the inclusion criteria, namely, being able to communicate effectively, having no severe cognitive impairment, being willing to participate, and being a permanent resident of Sombano Village, 100 elderly individuals were identified as eligible participants. All eligible elderly individuals were recruited and included in the study; therefore, a purposive sampling technique was employed. The final sample size of 100 participants exceeded the minimum requirement of 82 respondents calculated using the Lemeshow formula for correlation studies ($n = Z^2 \times p \times (1-p) / d^2$, with 95% confidence level, 5% margin of error, and estimated prevalence of 50%), ensuring adequate statistical power for bivariate and multivariate analyses.

Research Instrument

This study utilized three primary instruments: the Social Engagement and Activities Questionnaire (SEAQ) to measure the level of social involvement (Marti & Choi, 2022), the Spousal Support Scale (SSS) to assess perceived support from a spouse; and the Perceived Stress Scale (PSS-10) to assess stress levels among the elderly (Jatic *et al.*, 2023).

The Social Engagement and Activities Questionnaire (SEAQ)

The SEAQ was used to evaluate the extent of elderly participation in social and community activities. The questionnaire consists of 15 items covering the frequency of interactions with family, friends, or neighbors; participation in social activities such as religious gatherings, community service (*gotong royong*), and elderly exercise programs (*senam lansia*); as well as involvement in recreational or religious events. Each item is rated on a four-point Likert scale (1–4), where 1 indicates "never" and 4 indicates "always." Higher total scores reflect greater social engagement among respondents, with score ranges categorized as low (15–30), moderate (31–45), and high (46–60) social involvement (Marti & Choi, 2022).

Spousal Support Scale (SSS)

Spousal support was measured using an adapted version of the Spousal Support Scale, which assesses four dimensions of support: emotional support (expressions of empathy, love, and trust), instrumental support (tangible assistance with daily activities), informational support (advice and guidance), and appraisal support (affirmation and constructive feedback). The scale comprises 12 items rated on a four-point Likert scale (1 = never, 4 = always), with total scores ranging from 12 to 48. Higher scores indicate greater perceived spousal support. This instrument has been validated in Indonesian elderly populations with acceptable reliability (Cronbach's $\alpha = 0.84$). The Spousal Support Scale measures perceived support from a living spouse; only married participants completed the instrument. Widowed participants were excluded from analyses involving the spousal support variable. Because the Spousal Support Scale specifically measures support received from a living spouse, only participants who were currently married completed this instrument. Consequently, analyses involving spousal support were performed using the subset of married participants ($n = 61$), whereas all participants were included in analyses of social engagement and perceived stress.

Perceived Stress Scale (PSS-10)

Perceived stress was measured using the 10-item Perceived Stress Scale (PSS-10), one of the most widely used instruments for assessing the degree to which individuals perceive situations in their lives as stressful. Each item is rated on a five-point Likert scale ranging from 0 ("never") to 4 ("very often"), yielding a total score between 0 and 40. Higher scores indicate greater perceived stress and are commonly categorized as low (0–13), moderate (14–26), and high (27–40). The PSS-10 has demonstrated satisfactory psychometric properties across diverse populations, including older adults, with reported Cronbach's α values ranging from 0.78 to 0.91 (Jatic *et al.*, 2023).

Instrument Validation and Reliability

Prior to data collection, all instruments underwent pilot testing with 30 elderly individuals from a neighboring village with similar demographic characteristics. Internal consistency reliability was assessed using Cronbach's Alpha, yielding coefficients of 0.86 for SEAQ, 0.84 for SSS, and 0.89 for PSS-10, all exceeding the acceptable threshold of 0.70 (Nunnally & Bernstein, 1994). Content validity was established through expert panel review by three community nursing specialists and one gerontologist, who evaluated the relevance, clarity, and comprehensiveness of each item. Items with a Content Validity Index (CVI) ≥ 0.83 were retained. Minor linguistic adaptations were made to ensure cultural appropriateness for the Wakatobi community, including the use of local language equivalents for concepts such as "community service" and "elderly exercise."

Data Collection Mode

All instruments were administered through structured face-to-face interviews, considering that some respondents had limited reading and writing abilities. The researcher or two trained enumerators (nursing graduates who completed an 8-hour training session on interview techniques and ethical conduct) read each item aloud and recorded the respondents' answers accordingly. To ensure inter-rater reliability, both enumerators independently scored 10% of the interviews, achieving 98% agreement (Cohen's kappa = 0.96).

Data Collection Procedure

Data collection was conducted from July to August 2025. Prior to implementation, the researcher obtained official permission from the village government and ethical approval from the educational institution overseeing this study. The ethical review specifically addressed protections for vulnerable elderly participants, including informed consent procedures, confidentiality safeguards, and the right to withdraw. Subsequently, socialization and initial engagement activities were carried out with the elderly participants and their families to explain the purpose, benefits, and confidentiality of the research data (Khan *et al.*, 2023). These sessions were conducted in the local language (Bahasa Indonesia with Wakatobi dialect clarification as needed) and included visual aids to enhance comprehension among participants with low literacy levels.

Each respondent provided with informed consent form prior to the interview. For participants with limited literacy, the consent form was read aloud, and thumbprint signatures were accepted as legal equivalents to written signatures, witnessed by a family member or village healthcare workers. The interviews were conducted face-to-face, either at the respondents' homes or at the village hall, based on participant preference, lasting approximately 20–30 minutes per participant. A standardized interview protocol was used to minimize interviewer bias, with items presented in identical order and pacing across all sessions. During the interview, the researcher collected:

Demographic data: Age, gender, marital status, last educational attainment, and occupation;

Primary data: SEAQ, SSS, and PSS-10 questionnaire responses.

Of the 100 eligible participants, all completed the interview and questionnaire administration, resulting in a response rate of 100%. No missing data were identified; therefore, all completed questionnaires were included in the final analysis.

Statistical Analysis

Data was analyzed using descriptive and inferential statistical approaches. All analyses were performed using IBM SPSS Statistics version 29.0 (Purnamasari *et al.*, 2025). The significance level was set at $\alpha = 0.05$ for all tests.

A descriptive analysis was conducted to describe the characteristics of respondents (age, gender, marital status, education, and occupation) as well as the distribution of scores for social engagement and stress levels among the elderly. The results are presented in the form of frequencies, percentages, means, and standard deviations.

Bivariate analysis was used to examine the relationship between social engagement and stress levels, as well as between spousal support and stress levels among the elderly. Analyses involving the Spousal Support

Scale were conducted only among married participants. The statistical test employed was the Spearman Rank Correlation Test, as the data were ordinal and not normally distributed. A p -value < 0.05 was considered statistically significant.

Multivariate analysis (Multiple Linear Regression) was applied to determine the extent to which social engagement and spousal support jointly influence the stress levels of elderly individuals. This analysis also helped identify which variable had the most dominant effect on stress among the elderly population.

Ethical Consideration

The research obtained ethical approval from the Ethics Committee of Bani Saleh University, Indonesia with reference number EC.0162/KEPK/STKBS/VIII/2025 on 20th August 2025.

RESULTS

Characteristics

Table 1: Characteristics of Elderly Respondents in Sombano Village ($n = 100$)

Characteristic	Category	Frequency (n)	Percentage (%)
Age (years)	60–69	58	58%
	70–79	32	32%
	≥ 80	10	10%
Gender	Male	37	37%
	Female	63	63%
Marital Status	Married	61	61%
	Widowed	39	39%
Education	No formal education	8	8%
	Primary school	47	47%
	Junior high school	33	33%
	Senior high school	12	12%
Occupation	Farmer/Fisherman	54	54%
	Homemaker	30	30%
	Unemployed	16	16%

Table 1 shows that the majority of elderly respondents were aged 60–69 years (58%), followed by 70–79 years (32%), and 80 years or older (10%). Most respondents were female (63%), while males accounted for 37%. In terms of marital status, 61% of the elderly had a living spouse, while 39% were widowed. Regarding educational background, 47% completed primary school, 33% junior high school, 12% senior high school, and 8% had no formal education. The majority of respondents worked as farmers or fishermen (54%), followed by homemakers (30%) and unemployed individuals (16%). These characteristics suggest that most respondents were socially and economically active older adults with a basic educational background and the presence of spousal support.

Table 2: Level of Social Engagement among the Elderly (Based on SEAQ)

Social Engagement Category	Frequency (n)	Percentage (%)
Low (15–30)	20	20
Moderate (31–45)	44	44
High (46–60)	36	36
Total	100	100

Overall SEAQ score: Mean $\pm$ SD = 38.6 ± 7.2 (possible score range: 15–60)

Table 2 summarizes the level of social engagement among older adults as measured by the SEAQ. Of the 100 participants, 44% demonstrated a moderate level of social engagement, followed by 36% with high social engagement and 20% with low social engagement. The overall mean SEAQ score was 38.6 ± 7.2 (possible score range: 15–60), indicating that, on average, participants had a moderate level of social engagement. These findings suggest that most older adults in Sombano Village remained actively involved in social and community activities, although one-fifth of the participants reported relatively limited social participation.

Table 3. Stress Levels among the Elderly (Based on PSS-10)

Stress Level Category	Frequency (n)	Percentage (%)	Mean Score $\pm$ SD
Low (0–13)	24	24%	12.1 $\pm$ 1.8
Moderate (14–26)	49	49%	21.3 $\pm$ 3.5
High (27–40)	27	27%	30.2 $\pm$ 2.7
Total	100	100%	21.7 $\pm$ 6.3

Table 3 shows that 27% of elderly respondents experienced high stress, 49% moderate stress, and 24% low stress. The mean PSS-10 score was 21.7 ± 6.3 , indicating that most elderly individuals experienced moderate stress levels. High-stress respondents were typically those living alone, suffering from chronic illnesses (e.g., hypertension or diabetes), and having low social engagement. In contrast, elderly individuals with low stress tend to have strong spousal support and active social interactions. These findings confirm that stress levels among older adults are influenced by social factors, emotional support, and engagement in meaningful daily activities.

Table 4: Correlation between Social Engagement and Stress Levels among the Elderly

Variable	r_s	p	Interpretation
Social Engagement $\leftrightarrow$ Stress Level	-0.642	0.000	Significant negative correlation

As presented in Table 4, Spearman's rank correlation analysis demonstrated a statistically significant moderate negative association between social engagement and stress levels ($r_s = -0.642, p < 0.001$). This finding indicates that older adults with higher levels of social engagement tend to report lower perceived stress.

Table 5: Correlation between Spousal Support and Stress Levels among the Elderly

Variable	r (Spearman Rank)	p -value	Interpretation
Spousal Support $\leftrightarrow$ Stress Level	-0.587	0.000	Significant negative correlation

Table 5 shows Spearman's rank correlation analysis revealed a statistically significant negative association between perceived spousal support and stress levels ($r_s = -0.587, p < 0.001$). Older adults who perceived greater emotional, informational, instrumental, and appraisal support from their spouses tended to report lower stress levels. These findings suggest that perceived spousal support functions as an important psychosocial protective factor in later life.

Table 6: Multiple Linear Regression Analysis Examining the Effects of Social Engagement and Spousal Support on Stress Levels among Elderly

Predictor	β	SE	t	p	95% CI
Constant	35.21	2.14	16.44	<0.001	30.98 to 39.44
Social Engagement	-0.428	0.120	-3.57	<0.001	-0.66 to -0.19
Spousal Support	-0.337	0.115	-2.93	0.004	-0.56 to -0.11

Table 6 presents the results of the multiple linear regression analysis examining the effects of social engagement and spousal support on stress levels among older adults. After adjustment for both predictors, higher social engagement was significantly associated with lower stress levels ($\beta = -0.428, SE = 0.120, t = -3.57, p < 0.001, 95\% CI: -0.66$ to -0.19). Similarly, greater perceived spousal support was independently associated with lower stress levels ($\beta = -0.337, SE = 0.115, t = -2.93, p = 0.004, 95\% CI: -0.56$ to -0.11). The estimated regression equation was: Stress score = $35.21 - 0.428(\text{SEAQ}) - 0.337(\text{SSS})$.

DISCUSSION

The findings of this study reinforce the theory that positive social interaction and the presence of a spouse serve as protective factors against psychological stress in older adults. The analysis revealed a significant negative correlation between social activity and stress levels ($r = -0.642; p = 0.000$), as well as between spousal support and stress levels ($r = -0.587; p = 0.000$). This indicates that the more actively older adults participate in social activities and the greater the emotional support they receive from their spouses, the lower their perceived stress levels. Therefore, social engagement and supportive interpersonal relationships play an essential role in maintaining psychological well-being among the elderly.

Similar findings have been reported in previous studies. For example, Shoukat *et al.* (2024) found that regular participation in group-based activities significantly improves psychological well-being among older adults, which aligns with this study's result that higher social engagement correlates with lower stress. Additionally, Jang and Kim (2023) emphasized that emotional support from spouses acts as a buffer against psychological pressure, supporting our conclusion that spousal support reduces stress levels. However, unlike these studies, which were conducted in metropolitan or clinical settings, the present study contributes new insight by demonstrating that such protective effects are also strongly evident in rural and culturally cohesive community contexts, where communal values and shared living practices are more pronounced (Shoukat *et al.*, 2024).

Social activities not only provide opportunities for communication and sharing experiences but also foster a sense of belonging and being valued within the community (Lisnawati *et al.*, 2024). This condition helps reduce feelings of loneliness, enhances life meaning, and ultimately lowers the risk of psychological stress (Zhang *et al.*, 2023). Older adults who live with a spouse tend to have someone to share stories with, receive moral encouragement from, and rely on when facing physical or emotional challenges (Raeisvandi *et al.*, 2023). Swoboda *et al.* (2025) emphasized that the loss of a spouse is one of the major triggers of stress among older adults, as it evokes feelings of grief, loneliness, and diminished motivation for life. Thus, the presence of a spouse serves as a buffer against psychological and social stressors experienced in old age.

Multivariate analysis showed that social activity and spousal support simultaneously exert a significant effect on stress levels among older adults ($p = 0.000$), contributing 58% to the variance in stress levels ($R^2 = 0.58$). Among these variables, social activity had a greater influence on reducing stress ($\beta = -0.428$; $p = 0.001$) compared to spousal support ($\beta = -0.337$; $p = 0.004$). This finding suggests that, although emotional support from a spouse is important, broader social engagement within the community provides a stronger protective effect against stress in older adults. Socially active elderly individuals have greater opportunities to expand their social networks, develop a sense of connectedness, and maintain cognitive function through meaningful communication and activities (Peng & Roth, 2025).

The reduction of stress resulting from social engagement can also be explained through Erikson's psychosocial theory, which posits that in late adulthood individuals face the developmental crisis of integrity versus despair (Ramírez-Morros *et al.*, 2024). Older adults who engage in active social interaction are more likely to achieve ego integrity, a sense of fulfilment and acceptance of life, whereas socially isolated individuals are more prone to despair and psychological distress due to loss of social roles and limited adaptability (Davis, 2023). Therefore, social activity serves not only as recreation or a means of passing time but also as a therapeutic mechanism that promotes mental health and resilience in ageing individuals.

From a community nursing perspective, these findings hold significant implications. Community nurses can play an active role in designing and implementing empowerment programmes for older adults through group-based activities such as group exercise, elderly health posts, regular religious gatherings, and other social or recreational initiatives. These activities enhance social engagement and strengthen peer support networks among older adults, which have been shown to reduce stress and improve quality of life. Additionally, nurses should provide psychosocial support for those who have lost their spouses through group counselling, stress management training, and the establishment of emotional support groups (Ferrando *et al.*, 2025).

This study underscores that social activity and spousal support are key determinants in maintaining the mental health of older adults, particularly in rural settings such as Sombano Village. Older adults who are socially active and emotionally supported are better equipped to adapt to the changes associated with ageing and to sustain their psychological balance. Promotive and preventive efforts within community nursing should therefore focus on enhancing social participation and strengthening family-based social support to ensure the sustained mental well-being of older adults.

Limitations

This study has several limitations. First, the cross-sectional design precludes causal inference between social engagement, spousal support, and stress levels. Second, data were collected using self-reported

questionnaires, which may be subject to recall and social desirability bias. Third, the study was conducted in a single rural village, limiting the generalizability of the findings to older adults living in urban areas or different sociocultural settings. Finally, the analysis of spousal support was inherently limited to participants with a living spouse, which should be considered when interpreting the findings.

Future Scope

Future studies should employ longitudinal or prospective designs, recruit participants from multiple geographic settings, and incorporate qualitative or mixed method approaches to provide a more comprehensive understanding of psychosocial determinants of stress among the elderly.

CONCLUSION

This study found that both social engagement and spousal support were significantly associated with lower stress levels among community-dwelling older adults in Sombano Village. In the multivariable analysis, social engagement emerged as the stronger predictor of stress compared with spousal support. Together, these psychosocial factors explained a substantial proportion of the variation in stress levels among the study participants. These findings highlight the importance of promoting social participation and strengthening family support as part of community-based nursing strategies to support healthy aging and psychological well-being among the elderly.

The findings suggest that community nurses should incorporate psychosocial assessment into routine care for older adults, with particular attention to social engagement and family support. Community-based programs that encourage participation in social activities and strengthen supportive family relationships may contribute to reducing psychological stress among older adults. These findings provide evidence to support the integration of psychosocial health promotion into community and gerontological nursing practice, particularly in rural settings.

CRedit Authorship Contribution Statement

C.Y.: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Writing-Original Draft, Writing – Review and Editing. A.P: Conceptualization, Methodology, Supervision, Validation, Formal Analysis, Writing-Review and Editing, Project Administration. L.L: Investigation, Data Curation, Resources, Writing-Review & Editing. S.A.L.B: Investigation, Data Curation, Validation, Writing-Review and Editing. N.N: Methodology, Formal Analysis, Validation, Supervision, Writing-Review and Editing.

AI Assistance Declaration

During the preparation of this manuscript, the authors used generative Artificial Intelligence (AI) tools, including ChatGPT, solely for language enhancement, grammar checking, and improvement of sentence clarity. The AI-generated outputs were carefully reviewed, verified, and revised by the authors to ensure scientific accuracy, originality, and compliance with academic standards. The authors take full responsibility for the content of this manuscript and its final submitted version.

Conflict of Interest

The authors declare that they have no competing interests.

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