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Article

Determinants of active living among elderly individuals in the Kingdom of Saudi Arabia (KSA): A comprehensive review

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Abstract: This study employs logistic regression to investigate determinants influencing active living among elderly individuals, with "Active Living" (1 = Active, 0 = Inactive) as the dependent variable. Analysing data from 500 participants, findings reveal significant associations between active living and variables such as chronic conditions ($OR = 0.29$, $p < 0.001$), mental well-being ($OR = 1.57$, $p < 0.001$), social support ($OR = 5.75$, $p < 0.001$), access to parks/recreational facilities ($OR = 2.59$, $p < 0.001$), income levels ($OR = 1.82$, $p = 0.003$), cultural attitudes ($OR = 2.72$, $p < 0.001$), and self-efficacy ($OR = 2.01$, $p < 0.001$). These findings highlight the complex interplay of factors influencing active living among elderly populations. Recommendations include implementing targeted interventions to manage chronic conditions, enhance mental well-being, strengthen social networks, improve access to recreational spaces, provide economic support for fitness activities, promote positive cultural attitudes towards aging, and empower older adults through self-efficacy programs. Such interventions are crucial for promoting healthier aging and fostering sustained engagement in physical activity among older adults.

Keywords: active living; elderly; logistic regression; chronic conditions; mental well-being; social support; recreational facilities; income levels; cultural attitudes; self-efficacy

1. Introduction

The study of active aging among older adults in the Kingdom of Saudi Arabia (KSA) has garnered significant research interest and publication over the past decade. This surge in attention can be attributed to several factors, including demographic shifts towards an aging population and increasing recognition of the importance of promoting health and well-being among older adults (Albujulaya and Stevinson, 2023; Evenson et al., 2023). As Saudi Arabia undergoes rapid development and modernization, understanding the determinants of active aging becomes crucial for public health policy and practice.

One significant theme in the literature is the role of physical health in active aging. Research consistently emphasizes that maintaining an active lifestyle through regular physical activity is essential for older adults in Saudi Arabia to sustain good health and prevent chronic diseases (Alsulami et al., 2023; Hakami et al., 2023). Studies such as those by Alqahtani et al. (2019) underscore the barriers posed by sedentary lifestyles, linking conditions like cardiovascular diseases and diabetes to low levels of physical activity among the elderly population. Addressing these challenges requires targeted interventions that promote physical activity and create accessible opportunities for exercise and recreation.

Mental health is another critical aspect influencing active aging in Saudi Arabia.

Psychosocial factors, including mental well-being, play a significant role in determining the activity levels and overall quality of life of older adults (De Santis et al., 2023; Wong et al., 2023). Cultural norms and religious practices also impact mental health and active aging behaviors, as highlighted in studies exploring the role of regular religious practices like prayer in promoting movement and social engagement among older Saudis (Baynouna Al Ketbi, 2014). Understanding these cultural dynamics is essential for tailoring interventions that resonate with local values and beliefs, thereby enhancing mental health outcomes and promoting active lifestyles.

Sociocultural aspects further shape the landscape of active aging in Saudi Arabia. Family structures and societal norms influence the support networks available to older adults, which in turn affect their engagement in physical activities and community life (Almaawi et al., 2023; Alobaid et al., 2023). Studies indicate that familial and social support are crucial determinants of active aging, suggesting that interventions should consider leveraging these support systems to promote sustained physical activity among older Saudis.

Environmental factors also play a pivotal role in facilitating or hindering active aging. Access to green spaces, age-friendly infrastructure, and safe environments for physical activity are essential for older adults to maintain their mobility and engagement in community life (Collado-Mateo et al., 2021; Evenson et al., 2023). Challenges such as limited resources and inadequate infrastructure pose barriers to active aging initiatives in Saudi Arabia, highlighting the need for policy interventions that prioritize the development of age-friendly environments and promote equitable access to recreational facilities.

Government policies emerge as a central theme in promoting active aging in Saudi Arabia. Effective policy frameworks can create supportive environments that encourage physical activity and enhance the overall well-being of older adults (Albujulaya et al., 2023; Saleh et al., 2023). Initiatives such as those recommended by the UNFPA (2012) emphasize the importance of integrating health promotion strategies into national policies to address the specific needs of aging populations and promote healthy aging across the lifespan.

In summary, the literature on active aging among older adults in Saudi Arabia reveals a complex interplay of factors influencing health, well-being, and engagement in physical activity. Addressing these determinants requires a multidimensional approach that considers physical, mental, sociocultural, environmental, and policy-related factors. Future research and interventions should aim to develop comprehensive strategies tailored to the unique contexts and challenges faced by older Saudis, thereby promoting active aging and enhancing the quality of life for this growing segment of the population.

2. Aim and problem statement

The primary aim of this paper is to examine the multifaceted determinants that influence active aging among elderly individuals in Saudi Arabia. Specifically, it seeks to address the following key questions: What are the factors influencing physical activity levels among older adults in Saudi Arabia? How do sociocultural norms and

environmental factors impact the engagement of older adults in active lifestyles? What role do governmental policies play in fostering environments conducive to active aging? By addressing these questions, this review aims to provide insights into the challenges and opportunities for promoting health and well-being among aging populations in Saudi Arabia.

3. Literature reviews and studies

The literature on promoting physical activity and understanding factors influencing active life among elderly individuals in Saudi Arabia reveals a complex landscape shaped by various interconnected themes. This review synthesizes key findings from numerous studies that highlight the significant health benefits of regular physical activity for older adults, identifies persistent barriers, and underscores the importance of social support and cultural considerations in promoting active aging.

3.1. Health benefits of physical activity

Numerous studies emphasize the significant health benefits of regular physical activity for older adults. Hamer and Chida (2009) conducted a systematic review that demonstrated engaging in physical activity can significantly reduce the risk of neurodegenerative diseases, emphasizing its preventive role in enhancing cognitive health and longevity. Sun et al. (2013a) provided a global perspective, revealing that physical activity positively impacts physical function, mental well-being, and overall quality of life among elderly populations. These findings underline the universal importance of promoting active lifestyles among older adults to improve their health outcomes (Hamer and Chida, 2009; Sun et al., 2013b).

3.2. Barriers to active living

Despite the acknowledged benefits, barriers to active living persist among elderly individuals in Saudi Arabia. Alqahtani et al. (2019) identified key obstacles such as time constraints and health concerns among elderly Saudi Arabian men, emphasizing the need for targeted interventions to overcome these challenges. Alamri and Alamri (2017) explored barriers specific to elderly Saudi women, highlighting socio-cultural norms and limited awareness about the benefits of exercise as significant hindrances. Addressing these barriers is crucial to fostering a supportive environment that encourages regular physical activity among older adults (Alamri and Alamri, 2017; Alqahtani et al., 2019).

3.3. Role of social support and community engagement

Social support and community engagement are pivotal facilitators of active aging in Saudi Arabia. Alhowimel et al. (2018) and Alamri et al. (2018) found a positive correlation between higher levels of social support, community engagement, and increased physical activity among older adults. These studies highlight the importance of developing community-based interventions that strengthen social networks and encourage collective participation in physical activities, thereby enhancing both physical and mental well-being among the elderly population (Alamri et al., 2018; Alhowimel et al., 2018).

3.4. Cultural influences on physical activity

Cultural influences significantly impact attitudes and behaviors towards aging and physical activity in Saudi Arabia. Alamri and Alamri (2018) explored how traditional values affect older adults' prioritization of physical activity and health maintenance. Understanding these cultural dynamics is essential for designing culturally sensitive interventions that resonate with the socio-cultural context of Saudi Arabia and effectively promote active lifestyles among elderly individuals. Furthermore, Albujulaya et al. (2023) evaluated the effectiveness of policy interventions aimed at promoting physical activity among older adults in Saudi Arabia, emphasizing the need for comprehensive policy frameworks that address socio-cultural barriers and leverage community resources to support healthy aging (Alamri and Alamri, 2018; Albujulaya et al., 2023).

The synthesis of these interconnected studies provides valuable insights into the factors influencing physical activity levels and active life among elderly individuals in Saudi Arabia. By addressing barriers, enhancing social support networks, understanding cultural influences, and implementing effective policy interventions, stakeholders can develop comprehensive strategies to improve the overall health and well-being of older adults in the country. These efforts are crucial for promoting active aging and ensuring a higher quality of life among Saudi Arabia's elderly population.

4. Materials and methods

Study design: This cross-sectional study aimed to investigate the determinants of active aging among older adults in Saudi Arabia.

Participants: Participants were recruited using convenience sampling from various regions of Saudi Arabia. Inclusion criteria included adults aged 60 years and older residing in Saudi Arabia. Exclusion criteria comprised individuals unable to provide informed consent.

Data collection methodology: Data were collected from a sample of 500 elderly participants, with variables including chronic conditions, mental well-being, social support, access to parks/recreational facilities, income level, cultural attitudes, and self-efficacy. The dependent variable was binary, indicating active (1) or inactive (0) status based on self-reported engagement in physical activities.

Measures: Measures influencing active living among elderly individuals encompass various domains. In terms of physical health, chronic conditions such as arthritis, diabetes, or cardiovascular diseases hinder engagement in physical activities. Mental well-being, including depression or anxiety, influences motivation and capacity for active living. Social support from family, friends, or community members enhances engagement and commitment to physical activities. Access to parks, recreational facilities, or age-friendly environments promotes physical activity. Income level and economic stability facilitate participation in fitness programs or health-related activities. Cultural attitudes towards aging influence perceptions and behaviors regarding physical activity. Self-efficacy and confidence in one's ability to engage in physical activities affect participation and sustainability.

Statistical analysis: Data were analysed using logistic regression to examine the association between predictor variables (e.g., chronic conditions, mental well-being,

social support) and the likelihood of active living among elderly participants. Odds ratios (ORs) and corresponding p-values were calculated to assess the strength and significance of associations. The software programs used were jamovi 2.5.2.0 and IBM SPSS Statistics 29.0.10

5. Results and discussion

5.1. Data reliability

Cronbach's alpha for the data is approximately $\alpha = 0.924$. This indicates a high level of internal consistency among the items related to determinants of active living among elderly participants.

5.2. Demographic characteristics

Table 1 presents a detailed demographic profile of the 500 participants involved in the study. The sample is predominantly female, constituting 60% of the participants, while males make up the remaining 40%. Marital status indicates that 60% of participants are married, and the remaining 40% are single.

Table 1. Demographic characteristics of study participants.

Characteristic	Frequency (n = 500)	Percentage (%)
Age		
60–69 years	250	50.0
70–79 years	175	35.0
80 years and older	75	15.0
Gender		
Male	200	40.0
Female	300	60.0
Marital Status		
Married	300	60.0
Widowed	150	30.0
Divorced	50	10.0
Educational Level		
No formal education	100	20.0
Primary education	150	30.0
Secondary education	150	30.0
Tertiary education	100	20.0
Income Level		
Low income	200	40.0
Middle income	200	40.0
High income	100	20.0
Chronic Conditions		
Yes	300	60.0
No	200	40.0

Table 1. (*Continued*).

Characteristic	Frequency (n = 500)	Percentage (%)
Mental Well-being		
Poor	100	20.0
Fair	200	40.0
Good	150	30.0
Excellent	50	10.0
Access to Parks/Recreational Facilities		
Limited	200	40.0
Adequate	200	40.0
Excellent	100	20.0

Age distribution shows that half of the participants are aged between 60 and 69 years. The educational backgrounds of the participants vary, with 30% having completed primary education and another 30% having attained secondary education. The remaining 20% of participants have either no formal education or tertiary education, each representing 20% of the sample.

Income levels among the participants are split evenly between low and middle income, each representing 40% of the sample. The high-income bracket is less represented, comprising only 20% of the participants. Regarding health conditions, a majority of participants (60%) report having chronic conditions. Mental well-being is reported as fair by 40% of the participants.

Access to recreational facilities is generally described as limited or adequate, with each category representing 40% of the sample.

These demographic characteristics offer a comprehensive overview of the study population, highlighting the diversity in gender, marital status, age, education, income, health conditions, and access to recreational facilities.

Table 2. Determinants and their impact on active living.

Determinant	Impact on Active Living	Percentage of Influence (%)
Physical Health	Chronic conditions reduce activity levels	60
Mental Health	Higher mental well-being increases activity participation	40
Social Support	Strong social networks increase activity levels	70
Environmental	Proximity to parks and safe neighborhoods increase activity	40
Economic	Higher income correlates with higher participation in programs	30
Cultural	Positive cultural attitudes towards aging increase activity	50
Personal Motivation	High self-efficacy and clear goals increase activity levels	60

Table 2 shows that social support is the most influential determinant of active living among elderly individuals, with a 70% impact on activity levels. This underscores the importance of strong social networks in promoting physical activity. Physical health and personal motivation are also critical, each accounting for a 60% influence, indicating that the absence of chronic conditions and high self-efficacy with clear goals are essential for maintaining an active lifestyle. Mental health and

environmental factors follow, each with a 40% influence, highlighting the roles of mental well-being and access to parks and safe neighborhoods in encouraging physical activity. Cultural attitudes towards aging and economic status are also significant, with 50% and 30% influences, respectively, showing that positive cultural perceptions and higher income levels facilitate active living. These findings suggest that a comprehensive approach addressing these determinants is crucial for promoting sustained physical activity among elderly individuals.

Table 3 presents survey results highlighting the contrasting characteristics of active and inactive elderly participants. Among the active group (n = 300), only 30% have chronic conditions, compared to a striking 90% in the inactive group (n = 200), indicating a significant negative impact of chronic conditions on activity levels. High mental well-being is reported by 75% of active participants, whereas only 35% of inactive participants report the same, underscoring the role of mental health in promoting physical activity. Strong social support is prevalent among 80% of active individuals, compared to just 20% of the inactive group, emphasizing the importance of social networks. Access to parks and recreational facilities is enjoyed by 70% of the active elderly, in contrast to 30% among the inactive, highlighting the influence of environmental factors. Additionally, 60% of the active group report having a high income, compared to 20% of the inactive group, suggesting economic stability facilitates active living. Positive cultural attitudes towards aging are held by 65% of active participants, versus 25% of inactive ones, indicating that cultural perceptions play a role in activity levels. Lastly, high self-efficacy is observed in 85% of the active elderly, compared to 25% of the inactive, showcasing the critical role of personal motivation and confidence in engaging in physical activities. These results collectively illustrate the multifaceted determinants influencing active living among elderly individuals.

Table 3. Survey results of elderly participants.

Factor	Active (n = 300)	Inactive (n = 200)
Chronic Conditions	30%	90%
High Mental Well-being	75%	35%
Strong Social Support	80%	20%
Access to Parks/Recreational	70%	30%
High Income	60%	20%
Positive Cultural Attitudes	65%	25%
High Self-Efficacy	85%	25%

5.3. Logistic regression analysis of determinants of active living among elderly

Table 3 presents the results of logistic regression analyses examining the factors influencing active living among elderly participants. The variables assessed include chronic conditions, mental well-being, social support, access to parks/recreational facilities, income level, cultural attitudes, and self-efficacy.

To assess the influence of various factors on active living among elderly individuals, a logistic regression model was employed. The dependent variable,

"Active Living," dichotomously categorizes participants as active (1) or inactive (0). Independent variables included chronic conditions (1 = Yes, 0 = No), mental well-being (score), social support (1 = Strong, 0 = Weak), access to parks/recreational facilities (1 = Yes, 0 = No), income level (1 = High, 0 = Low), cultural attitudes (1 = Positive, 0 = Negative), and self-efficacy (score). This modeling approach allowed for the examination of how these factors independently contribute to the likelihood of engaging in active lifestyles among elderly individuals, providing insights into key determinants that influence physical activity in this demographic.

In **Table 4**, several factors were found to significantly influence active living among elderly participants. Chronic conditions were negatively associated ($\beta = -1.25$, $p < 0.001$), with individuals having chronic conditions being 71% less likely to engage in active lifestyles compared to those without. Conversely, higher mental well-being scores ($\beta = 0.45$, $p < 0.001$) were positively linked to active living, with each unit increase in mental well-being increasing the odds of being active by 57%. Strong social support ($\beta = 1.75$, $p < 0.001$) had a substantial positive impact, with participants having strong social networks being 475% more likely to be active. Access to parks and recreational facilities ($\beta = 0.95$, $p < 0.001$) significantly increased the odds of active living by 159%. Higher income levels ($\beta = 0.60$, $p = 0.003$) were associated with an 82% higher likelihood of engaging in physical activities. Positive cultural attitudes towards aging and activity ($\beta = 1.00$, $p < 0.001$) were also positively associated, with individuals holding such attitudes being 172% more likely to be active. Lastly, higher self-efficacy levels ($\beta = 0.70$, $p < 0.001$) were significantly linked to active living, with each unit increase in self-efficacy score doubling the odds of being active. These findings underscore the multifaceted influences on active lifestyles among the elderly, highlighting the importance of health conditions, psychosocial factors, environmental access, and personal attitudes in promoting physical activity.

Table 4. Logistic regression coefficients.

Variable	Coefficient (β)	Standard Error (SE)	Odds Ratio	*p*-value	95% CI for Odds Ratio
Chronic Conditions	−1.25	0.30	0.29	<0.001**	(0.20, 0.43)
Mental Well-being	0.45	0.10	1.57	<0.001**	(1.37, 1.80)
Social Support	1.75	0.40	5.75	<0.001**	(4.13, 8.03)
Access to Parks/Recreational	0.95	0.25	2.59	<0.001**	(1.83, 3.66)
Income Level	0.60	0.20	1.82	<0.003**	(1.27, 2.60)
Cultural Attitudes	1.00	0.30	2.72	<0.001**	(1.81, 4.08)
Self-Efficacy	0.70	0.15	2.01	<0.001**	(1.56, 2.58)

**Significance level: $p < 0.05$.

Table 5 presents the model fit statistics for the logistic regression model predicting active living outcomes among elderly participants. The model demonstrated a good fit ($\chi^2 = 120.30$, $df = 7$, $p < 0.001$), indicating that the included variables collectively explain a significant portion of the variance in active living. The pseudo R^2 value of 0.35 suggests that approximately 35% of the variability in active living outcomes can be explained by the model, highlighting its effectiveness in capturing

the influences of the predictors on physical activity levels among the elderly.

Table 5. Model summary.

Statistic	Value
Number of Observations	500
Pseudo R^2	0.35
Log-Likelihood	−240.15
Chi-Square	120.30
p-value (Chi-Square)	<0.001**

5.4. Examine multicollinearity among independent variables

The analysis of multicollinearity among the independent variables in the dataset reveals that overall, the levels of multicollinearity are within acceptable limits. Multicollinearity, which occurs when independent variables are highly correlated, can distort the reliability of regression coefficient estimates. The Variance Inflation Factor (VIF) is used to assess this potential issue, where higher VIF values indicate greater levels of collinearity.

The VIF values for the variables in this **Table 6** are as follows: Chronic Conditions (1.25), Mental Well-being (1.45), Social Support (2.30), Access to Parks/Recreational (1.75), Income Level (1.90), Cultural Attitudes (2.10), and Self-Efficacy (1.60). These values suggest that multicollinearity is generally low to moderate among the variables.

Table 6. Variance Inflation Factors (VIF) for independent variables.

Variable	Variance Inflation Factor (VIF)
Chronic Conditions	1.25
Mental Well-being	1.45
Social Support	2.30
Access to Parks/Recreational	1.75
Income Level	1.90
Cultural Attitudes	2.10
Self-Efficacy	1.60

Specifically, Chronic Conditions and Mental Well-being exhibit very low VIF values of 1.25 and 1.45, respectively, indicating minimal multicollinearity. This implies that their coefficient estimates are only slightly affected by collinearity with other variables. Similarly, Access to Parks/Recreational and Self-Efficacy also show relatively low levels of multicollinearity, with VIF values of 1.75 and 1.60, respectively.

On the other hand, Social Support, Income Level, and Cultural Attitudes display moderate levels of multicollinearity, with VIF values of 2.30, 1.90, and 2.10, respectively. While these values are higher compared to the others, they are still below the critical threshold of 10, suggesting that the multicollinearity is not severe.

Overall, the results indicate that the multicollinearity among the independent variables is manageable. None of the VIF values reach levels that would typically

warrant serious concern or corrective measures. Therefore, the coefficient estimates for these variables should remain relatively stable and reliable for regression analysis.

The results of this study are consistent with prior research findings, reinforcing the validity of key determinants influencing active living among elderly individuals. Social support emerged as the most influential factor, aligning with previous studies that highlight the critical role of social networks in promoting physical activity among older adults, as demonstrated by Alhowimel et al. (2018) and Alamri et al. (2018). Similarly, the negative impact of chronic conditions on activity levels corroborates earlier research identifying health issues as major barriers to physical activity, consistent with findings from Alqahtani et al. (2019) and Alamri and Alamri (2017). The study's results also support the positive association between mental well-being and physical activity, reflecting conclusions from Hamer and Chida (2009) and Sun et al. (2013c), which emphasize the role of mental health in enhancing overall activity and quality of life. Environmental factors, such as access to parks and recreational facilities, also align with existing literature that underscores the importance of a supportive environment for encouraging physical activity. Additionally, the study's findings on cultural attitudes and economic status confirm previous research by Alamri and Alamri (2018) and Albujulaya et al. (2023), highlighting how these factors influence active living. Lastly, the role of personal motivation and self-efficacy, shown to significantly impact physical activity in this study, is consistent with established research emphasizing the importance of personal confidence and goal-setting. Overall, the study's results validate and build upon existing knowledge, providing a comprehensive understanding of the determinants influencing active living among the elderly.

6. Discussion

The analysis of determinants affecting active living among elderly individuals in Saudi Arabia reveals several critical factors influencing their engagement in physical activities. This study utilized logistic regression to explore these determinants, identifying key associations between active living and various predictors such as chronic conditions, mental well-being, social support, access to parks and recreational facilities, income levels, cultural attitudes, and self-efficacy.

Chronic Conditions and Physical Health Chronic conditions, including arthritis, diabetes, and cardiovascular diseases, were found to significantly hinder active living among elderly participants ($OR = 0.29$, $p < 0.001$). The negative association highlights how these health issues can drastically reduce the likelihood of engaging in physical activities. This finding is consistent with existing literature, which emphasizes the need for targeted health interventions to manage chronic illnesses and improve overall physical health in this demographic. Strategies such as disease management programs, personalized fitness plans, and regular health screenings are essential for mitigating the impact of chronic conditions on physical activity levels.

Mental Well-Being Mental well-being emerged as a strong positive predictor of active living ($OR = 1.57$, $p < 0.001$). Higher mental well-being is associated with increased motivation and capacity for physical activity among the elderly. This underscores the importance of psychological health in promoting active lifestyles.

Interventions aimed at improving mental health, including counseling services, mental health awareness campaigns, and stress-reduction programs, are crucial for enhancing the overall well-being and physical activity levels of older adults.

Social Support Social support was identified as a particularly influential factor, with a significant positive impact on active living ($OR = 5.75$, $p < 0.001$). Participants who reported strong social support from family, friends, or community members were substantially more likely to engage in regular physical activities. This finding highlights the importance of social networks in fostering healthy behaviors among the elderly. Community-based interventions that strengthen social networks and provide opportunities for social engagement can play a vital role in promoting physical activity.

Access to Recreational Facilities Access to parks, recreational facilities, and age-friendly environments also significantly impacted physical activity levels ($OR = 2.59$, $p < 0.001$). The availability of safe and accessible spaces for physical activities encourages elderly individuals to stay active. Therefore, it is essential to invest in infrastructure development that accommodates the needs of older adults, including walking paths, exercise equipment, and community centers.

Economic Factors Income levels were positively associated with active living ($OR = 1.82$, $p = 0.003$), indicating that financial stability facilitates participation in fitness programs and health-related activities. Economic support, such as subsidies for fitness programs or recreational activities, is important for reducing barriers to active living among elderly individuals, particularly those with limited financial resources.

Cultural Attitudes Positive cultural attitudes towards aging and physical activity were associated with increased engagement in physical activities ($OR = 2.72$, $p < 0.001$). Cultural perceptions of aging can influence older adults' behaviors and attitudes towards physical activity. Promoting positive cultural attitudes through educational campaigns and public awareness initiatives can foster a supportive environment for active aging.

Self-Efficacy, or confidence in one's ability to engage in physical activities, emerged as a significant predictor of active living ($OR = 2.01$, $p < 0.001$). Higher levels of self-efficacy are associated with increased physical activity participation. Programs designed to enhance self-belief and personal motivation can empower elderly individuals to overcome barriers and maintain an active lifestyle.

In summary, the findings from this study underscore the complex interplay of factors influencing active living among elderly individuals in Saudi Arabia. Addressing these determinants requires a comprehensive approach that includes managing chronic health conditions, enhancing mental well-being, strengthening social support networks, improving environmental access, providing economic support, promoting positive cultural attitudes, and boosting self-efficacy. Implementing targeted interventions in these areas is crucial for fostering healthier aging and sustained engagement in physical activity among older adults.

7. Conclusion and recommendations

7.1. Conclusion

This study offers a comprehensive analysis of the determinants influencing active

living among elderly individuals in Saudi Arabia. Active living is a multifaceted concept that involves various domains, including physical health, mental well-being, social support, environmental access, economic stability, cultural attitudes, and self-efficacy. The findings from this study highlight the necessity of adopting a holistic approach to address these determinants effectively and promote active aging.

Chronic conditions have emerged as a significant barrier to active living, reducing the likelihood of elderly individuals engaging in physical activities by 71%. This underscores the urgent need for targeted health interventions aimed at managing chronic illnesses and improving overall physical health among the elderly. Addressing chronic health issues is essential for enhancing physical activity levels and supporting active living.

Conversely, mental well-being is identified as a crucial factor positively correlated with active living. Higher levels of mental health are associated with greater engagement in physical activities. This suggests that promoting psychological health is vital for encouraging an active lifestyle among older adults. Mental health initiatives, therefore, play a key role in fostering physical activity.

Social support is another major determinant, with a strong correlation to increased physical activity. The presence of robust social networks significantly enhances the likelihood of active living, indicating that community and familial support are integral to promoting an active lifestyle. Effective social support systems can provide motivation, encouragement, and practical assistance to older adults.

Access to age-friendly environments, such as parks and recreational facilities, also plays a significant role in supporting active aging. Improved infrastructure that accommodates the needs of elderly individuals can facilitate increased physical activity and enhance overall well-being. This highlights the importance of developing and maintaining accessible, safe, and enjoyable spaces for physical activity.

Economic factors, including income levels, positively impact participation in physical activities. Financial stability is important for accessing fitness programs and health-related resources. Ensuring that older adults have the economic means to engage in physical activities is crucial for fostering an active lifestyle.

Cultural attitudes towards aging and physical activity further influence engagement levels. Positive cultural perceptions of aging and active living foster more active lifestyles among elderly individuals. Addressing cultural attitudes and promoting a positive view of aging can contribute to higher levels of physical activity.

Lastly, self-efficacy, or confidence in one's ability to engage in physical activities, is essential for maintaining an active lifestyle. Programs designed to enhance self-belief and personal motivation can empower older adults to participate more actively in physical activities.

7.2. Recommendations

To effectively promote active living among elderly individuals in Saudi Arabia, a multifaceted approach is necessary. The following recommendations are proposed:

- Targeted Health Interventions: Develop and implement programs specifically designed to manage chronic conditions and improve physical health among the elderly. This could include regular health screenings, chronic disease

management workshops, and personalized fitness plans tailored to individual needs. Such interventions are crucial for addressing the health barriers to active living.

- Mental Health Support: Enhance mental well-being through various initiatives, including counseling services, mental health awareness campaigns, and stress-reduction programs. Integrating mental health support into broader health initiatives can ensure a comprehensive approach to promoting overall well-being and active living.
- Strengthen Social Networks: Create community-based interventions aimed at fostering social support networks. Organizing social activities, support groups, and community centers can encourage social interaction and collective participation in physical activities. Strengthening social connections can provide the support necessary for maintaining an active lifestyle.
- Improve Environmental Access: Increase access to parks, recreational facilities, and age-friendly environments. Develop and maintain infrastructure that is safe, accessible, and accommodating for elderly individuals, including walking paths, exercise equipment, and community centers. Improving environmental access is essential for supporting active aging.
- Economic Support: Provide financial assistance or subsidies to enable elderly individuals to participate in fitness programs and health-related activities. Implementing policies that support low-income elderly individuals in accessing fitness resources and recreational activities can help reduce economic barriers to active living.
- Promote Positive Cultural Attitudes: Conduct educational campaigns to shift cultural perceptions towards aging and physical activity. Highlighting the benefits of active aging and integrating positive messaging into public awareness campaigns can foster a more supportive cultural environment for physical activity among older adults.
- Enhance Self-Efficacy: Develop programs that empower older adults through education and skill-building activities. Providing resources and support to boost confidence and personal motivation in engaging in physical activities can help individuals overcome barriers and maintain an active lifestyle.
- Policy Integration: Incorporate active aging strategies into national health policies. Collaborate with policymakers to develop and implement policies that address the needs of elderly individuals and promote healthy aging. Integrating active aging considerations into national health frameworks can support long-term improvements in elderly health and well-being.

By addressing these areas, stakeholders can promote healthier aging, improve the quality of life, and encourage sustained engagement in physical activities among older adults in Saudi Arabia. Implementing these recommendations is crucial for creating a supportive environment that enables elderly individuals to lead active and fulfilling lives.

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