Quality of life of elderly people living in Taif, Saudi Arabia: a scoping review.

Chapter 33
Quality of Life of Elderly People Living in Taif, Saudi Arabia: A Scoping Review

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Abstract Rapid socio-economic and demographic changes have promoted the adoption of modern lifestyles such as moving to and working in urban cities, which may impact the well-being of elderly populations. This chapter explores the daily activities, healthy aging, and Quality of Life (QoL) of elderly people living in Taif City, Saudi Arabia. The study identifies and interprets the interrelation and integration between daily activities, healthy aging, and QoL of elderly people living in Taif. The research recommends for developing new strategies to serve the elderly people in the rapidly aging Saudi society.

1 Introduction

In the Gulf region, the family structure plays an important role in population growth and is considered an integral part of social ties and community development (Khan et al., 2017). However, rapid socio-economic changes and demographic shifts have led to more people living in urban areas and adopting a more modern lifestyle (Baily, 2020). These changes have disrupted traditional norms and values, such as choices about family formation and size, and elderly care. Most importantly, they have had a negative impact on the Quality of Life (QoL) of elderly people in the Kingdom of Saudi Arabia (KSA). A recent study in KSA by Haidari and Khan (2022) found that this negative impact is associated with changes in family structure and daily activities within the community. However, there is limited evidence in the literature to confirm

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these findings due to a lack of scientific data. This paper conducts a scoping review of existing studies on elderly people in Saudi Arabia.

Currently the Saudi government policy concentrates on priorities based on younger generation. However, the government has not completely ignored the reality of a high proportion of its population who are going to age in the years to come. The government is keen on initiating policies to ensure that active aging and QoL are achieved within the local Saudi community. Little is known about the daily activities of the Saudi elderly, and it impacts their QoL in the region. Moreover, existing studies on QoL are highly dominated by the medical profiles of older people living in Saudi Arabia. Therefore, it is important to study community-based numerous activities of elderly and how it impacts the QoL of the elderly population in Saudi Arabia. Such a study would help policymakers to take adequate actions on the government services, resource allocations, and elderly well-being in Taif city. This study rationale is to explore the ageing situation in Taif as its preferred city for many people after their retirement. Thus, the accessibility to all the government services as well as good climate makes it interesting for elderly to settle after their retirement. Furthermore, the initial research in this study may be starting point to set foundations for robust research outcomes. Henceforth, the similar research concepts could be applied in Saudi cities such as Riyadh, Jeddah, Makkah, and Medina. Furthermore, given the structure of bigger cities, optimization of results and resources may be challenging if research foundations are not developed by piloting in smaller cities such as Taif.

Saudi Arabia, the largest country in the Gulf Cooperation Council (GCC) with a predominantly Muslim population, has experienced significant economic growth over the past five to six decades. This economic growth has had a major impact on people's lives and living conditions. The country is also undergoing major changes in terms of population growth and age structure. The increase in life expectancy, lower fertility, declining mortality, and other factors that encourage longevity, are putting pressure on urban lifestyles. This is interrelated with urbanization that is disrupting traditional norms such as people's choice of family formation and size as well as care for the elderly.

The World Health Organization (WHO) defines QoL as an individual's sense of their place in life in relation to their goals, aspirations, standards, and concerns, as well as the cultural and value systems in which they live. In Saudi Arabia, the key factors of QoL predominantly depend on daily activities, integration into the local community, and care provision for the elderly.

1.1 Aging Population in Saudi Arabia

The demographic shift toward an aging population is a global phenomenon, and Saudi Arabia is no exception (Saxena, 2013). In 2019, the population aged 65 and older was 1.16 million (3.4%) of the country's total population, which is projected to

increase to 2.37 million (6.0%) by 2030 (UN, 2019). This increasing trend in the 65+ age group is creating a demand for new services such as care and medical facilities, recreational activities, and community involvement.

1.2 The Importance of QoL for Elderly People

The quality of life of elderly people is a global concern for policymakers, healthcare institutions, social systems, and civil society. The increase in the number of elderly people in Saudi Arabia raises questions about whether the country's healthcare system is ready to provide quality healthcare services to this population group. In fact, the QoL of an elderly person is largely dependent on family structure, daily activities, and demographic shift. Meanwhile, the Saudi government is in the early stages of recognizing that healthy aging and quality of life will emerge as key priorities in the years to come (UNICEF, 2020).

2 Literature Review

There is limited evidence in the literature regarding the impact of various socioeconomic and demographic factors on the quality of life (QoL) of elderly people in Saudi Arabia. Therefore, a literature review is needed to consolidate existing knowledge. A scoping review, which is an effective method for identifying research gaps and guiding future research (Tricco et al., 2018), was conducted to explore available literature and databases on the QoL of elderly people in Saudi Arabia. Initial findings revealed a lack of significant studies focused on the QoL of elderly individuals at the community level in Taif, Saudi Arabia.

The initial search focused on the question, "What is the QoL of elderly people in Taif, Saudi Arabia?." It was performed using the Google Scholar, PubMed, Cochrane, and Medline databases. Additional keywords were added incorporating truncation and wildcards to the EBSCOhost, PubMed, and Google Scholar databases. A comprehensive search of peer-reviewed articles and gray literature was also conducted from June 2022 to September 2023.

There was no formal quality appraisal for this scoping review as its aim was to capture relevant literature on the topic. Two independent reviewers worked together to extract data that included authors, year of publication, title, country, study design, aim, inclusion criteria, intervention type, data source, analysis, outcomes, and key findings (see Appendix A). The JBI template source of evidence details, characteristics, and results extraction instrument was used as guidance for data extraction.

The total number of relevant articles identified through the above databases was 150 (Flow Chart 1). Existing literature shows that the QoL of elderly people can be assessed based on their medical profile. However, interventions and studies at the

community level are not well explored and data from 15 articles were thoroughly reviewed (see Appendix A).

The findings of this study will help policymakers understand the challenges that elderly people in the region face in relation to their quality of life (QoL) and assist them in developing strategies to improve their health and well-being.

3 Methods

This scoping review aims to explore the QoL of elderly people living in Taif city of Saudi Arabia, and incorporates experimental study designs, quasi-experimental studies, and government reports. The main review question was, "Do daily activities improve the quality of life (QoL) of elderly people living in the Taif city of Saudi Arabia" and "What are the daily activities of elderly people living in Taif city of Saudi Arabia." The study explored peer-reviewed articles on the topic that were published in the last ten years. The findings were synthesized from 15 articles on QoL of elderly people living in KSA within the Saudi community. The keywords used in the Boolean search of EBSCOhost, PubMed, and Google Scholar databases, as well as secondary research, were: QoL, aging population, retirement, longevity, daily activities, healthy aging, and Saudi Arabia. The inclusion and exclusion criteria were devised on the basis of JBI guidelines.

3.1 Inclusion and Exclusion Criteria

The inclusion criteria involved studies with participants aged 60 years and above, both male and female, living in Saudi Arabia (KSA). The excluded studies involved elderly people with a medical treatment profile whose QoL may have been affected by their health conditions. Cultural factors, family norms, and the specific geographical location of Taif city were also considered. It was deemed of paramount importance that specific daily activities determined by healthy aging and urbanization affecting family structures were also explored. Analytical observation of inclusion criteria also included prospective, retrospective, descriptive observational, and cross-sectional studies. Studies that focused on qualitative data, not limited to grounded theory or qualitative description, and opinion papers were also explored (Table 1).

This scoping review of the quality of life of elderly people living in Taif was conducted using JBI methodology and the PRISMA-ScR reporting standards (Appendix A). The exploratory nature of the review meant that tangible publications on quality of life, healthy aging, and the daily activities of elderly people in Taif were identified. However, there was limited primary trial evidence or high-level aggregated data on these topics (Table 2).

Table 1 PCC criteria for the review adapted from (Aladel et al., 2023)

Criteria	Determinants (JBI's updated Manual, 2020)	Inclusion criteria	Exclusion criteria
Population/ participants	Participants must be from the Taif region of Saudi Arabia and be above retirement age	The daily activities of participants, including their spiritual routine, family ties, and financial dependence, should be included in the study	Participants living outside Taif and below the age of 60 should not be considered for the study
Content	Research publications within the last 10 years on the quality of life studies, either in Saudi Arabia or globally, where participants' daily habits determine the quality of life and healthy aging	Studies conducted in the city of Taif, Saudi Arabia, within community settings	Hospitals and medical facilities should be excluded, as there are many studies based on the medical profiles of the elderly
Source of evidence	Gray Literature and empirical studies	Government and statistical society reports and academic research resources that meet the selection criteria	Evidence from literature reviews, study reports, and news blogs should not be considered
Others	Language and study duration	All reports and studies were conducted in English. The time frame for the search is from 2015 to 2023	All reports and studies meet the remaining criteria but are written in other languages. All studies meet the criteria but were conducted before 2015

Table 2 The above table shows the search terms used in the review; the key definitions are explained below

Construct of study	Search terms
Study design	Scoping review
Quality of life	Elderly quality of life, healthy aging, and daily activities in Saudi Arabia: Public health, community, and health services
Context	Public health, community, and health services
Avoided search terms	Global, Arab, and medical elderly QoL

3.2 Search Strategy

An initial search was carried out on Google Scholar and PubMed. Preliminary searches of Google Scholar, Medline, and Cochrane databases did not identify any community-based studies or reviews on the quality of life of elderly people living in Taif, Saudi Arabia. It was clear, however, that more research has been conducted on the medical profiles of elderly people living in Saudi Arabia, but there is no review at the community level to suggest that the quality of life of elderly people is determined by healthy aging. The articles listed above were identified by the keywords in the titles and abstracts. These keywords and terms were then adapted to include information on study sources. Reference lists of all sources of evidence were screened for more published studies.

Peer-reviewed reports and articles from government sources, as well as gray literature such as care home registers, unpublished studies, and trials, were included in the review. The published reports and studies on the QoL of elderly people living in Saudi Arabia range from 2012 to 2022 and are in English.

3.3 Selection of Sources of Evidence and Data Extraction

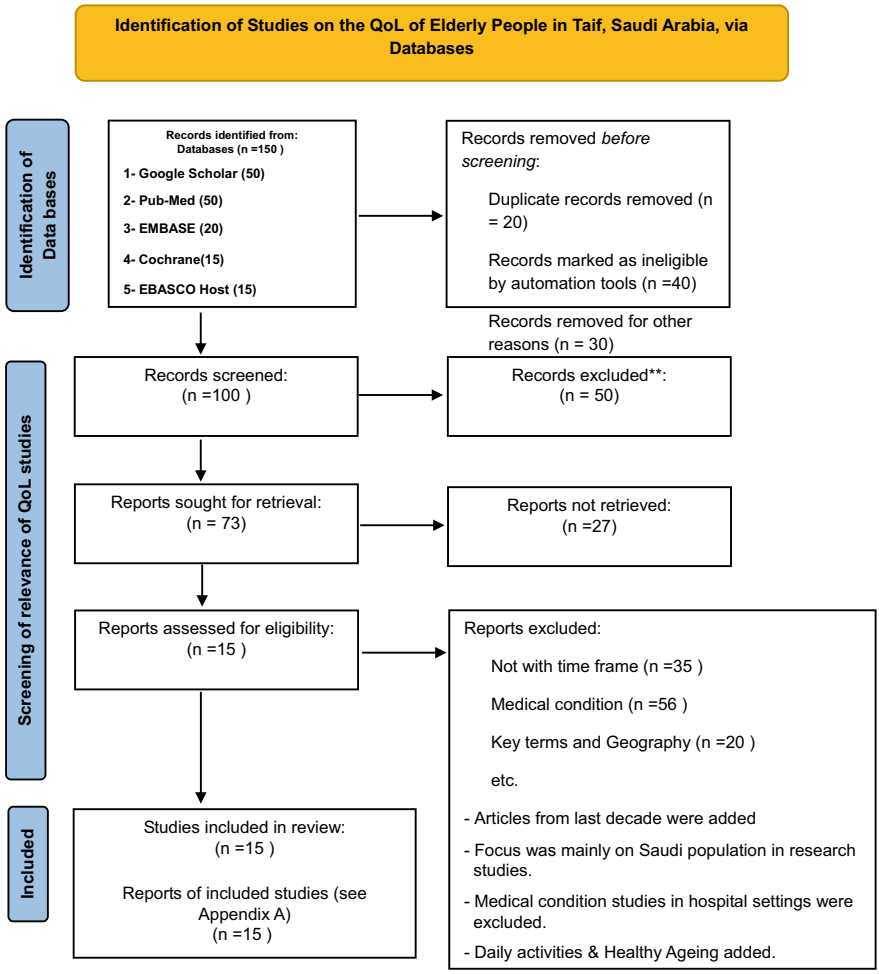
Citations identified from the initial search were collated and uploaded to RefWorks ProQuest Beta (2023) via the University of West London Academic Portal with duplicates removed. Independent reviewers screened titles and abstracts to assess whether they met the inclusion criteria. Potentially relevant sources from the pilot study were retrieved and added to the review while following JBI 2020 guidelines. The full texts of identified articles were fully assessed and matched against the inclusion criteria by an independent reviewer. The reasons for excluding sources that did not meet the criteria were explained and reported in the scoping review and disagreements between stakeholders were resolved through concrete discussions. The results of the scoping review search and inclusion criteria were detailed, reported, and presented in a PRISMA-ScR flow diagram (PRISMA.org 2023). Data extraction was performed using a developed tool in consultation with independent reviewers and relevant stakeholders. The extraction included specific details about the participants, such as their daily activities, concepts related to QoL, and the cultural context of participants. The key findings that emerged from this process are sufficient to address the sub-questions of the review.

3.4 Data Charting Process

The PRISMA extension for scoping reviews (PRISMA-ScR: Preferred Reporting Items for Systematic Reviews and Meta-Analyses) was published in 2018. The

PRISMA-ScR checklist, containing 20 essential reporting items, was used to guide this review. Scoping reviews synthesize evidence on a specific topic, as well as assess the scope of the literature on the topic and identify gaps. In addition, scoping reviews can help determine whether a systematic review of the literature is feasible for future studies (Altamimi et al., 2016). Public health research requires both quantitative and qualitative data to fully answer research questions. The measures needed for this study were pre-defined and based on the PCC framework (Table 1).

The flow chart above illustrates the steps involved in conducting the scoping review for this study. Prior to defining the search strategy, exclusion and inclusion criteria were devised to help identify commonalities and themes. The search strategy



Flow Chart 1 Identification of studies on the QoL of elderly people in Taif, Saudi Arabia, via databases. Adapted from Page et al. (2021)

involved exploring different databases using relevant keywords and identified articles were added to the review.

3.5 JBI Quality Check for Selected Papers

JBI critical appraisal tools are used to assess the trustworthiness, relevance, and results of published papers. There are also other checklists based on each type of study. Scoping reviews are valuable tools for synthesizing evidence and addressing broad research questions by mapping evidence from a variety of sources (Imran et al., 2019). The 15 selected research articles that were identified for this study were broad in scope, aim, and design. The search was then extended to include government reports from various ministries and social welfare organizations. However, reports in Arabic format did not meet the selection criteria and qualitative approaches dominated quantitative research. These articles likely examined determinants affecting family norms, such as elderly care, including QoL as determined by healthy aging. Other identified articles focused on the medical profiles of those facing family norm challenges and compromised QoL (Bindawas et al., 2018).

4 Results

4.1 Scoping Review Findings

The scoping review explored available literature on the quality of life (QoL) of elderly people as determined by healthy aging and daily activities. The objective was to highlight the integration of QoL with family and cultural norms that are being disrupted by urbanization. Healthy aging studies on elderly people living in the GCC and KSA were also considered. Due to the limited available literature on the QoL of elderly people in KSA, the research was broadened to include global studies. The findings indicated a strong link between the QoL of elderly people and its integration with urban disruptive factors, including healthy aging. However, cultural and traditional values, such as people's choice of family formation, family size, and elderly care, are significant variables that warrant further study (Alatawi et al., 2023).

4.2 Limitations

The scoping review has some limitations that may affect its usefulness for policymakers. First, formal assessments of the methodological quality of the included

studies were not performed and could introduce bias into the findings. Second, the review did not provide any specific recommendations for policymakers. A key feature of systematic reviews is the provision of implications. To address these limitations, future research could include a formal assessment of the methodological quality of the included studies that would help to ensure that the findings are reliable and generalizable. Additionally, future research could provide specific recommendations for policymakers based on the findings of the scoping review.

4.3 Suggestions for Improvement

To further strengthen the scoping review, it is recommended that a formal assessment of the methodological quality of the included studies is carried out. This could be achieved using a validated tool, such as the Quality Assessment Tool for Quantitative Studies (QAT-QS). This process could then provide policymakers with specific recommendations based on the findings of the scoping review and should be clear, concise, and actionable. The use of multiple reviewers to independently assess the studies and findings would help to limit bias.

5 Discussion

Government policy indicators, such as those from the Saudi Ministry of Human Resources and Social Development and the Saudi Statistical Society, suggest that the government's focus is currently on urgent priorities. The priorities include addressing the growing school-age population, the rising number of out-of-school children, shifts in the composition of the youth labor force, the increasing youth unemployment rate, the growing entry of young women into the labor market, and government spending on healthcare. However, the Saudi government has not completely ignored the fact that the proportion of Saudis who are elderly is going to increase in the coming years. Therefore, the government is keen to initiate studies to ensure that healthy aging and quality of life are achieved among the elderly population.

Exploring the daily activities of Saudi elderly people could provide indications of whether healthy aging and quality of life are being achieved. It is noteworthy that most of the research on the QoL of elderly people in Saudi Arabia is heavily skewed toward medical profiles. Therefore, it is imperative to conduct and analyze community-based studies on the QoL of the elderly population, such as those living in Taif, Saudi Arabia. This will enable identification and understanding of the disruption caused by urbanization and its impact on cultural and family norms. The scoping review conducted for this study explored and identified studies on QoL as determined by healthy aging. It is evident that certain concepts, studies, and government reports are viable for mapping out the concepts related to the QoL of the elderly living in Taif, Saudi Arabia.

AlAhmari et al. (2022) employed the WHOQOL-BREF to examine different domains of QoL in the local Saudi community, evaluating the study outcomes. The findings suggest that healthcare authorities should adequately plan effective interventions to enhance and elevate QoL. The scoping review in this study revealed there is a gap in the community assessment of QoL and a dearth of scientific literature. Additionally, Elezbawy et al. (2022) found a scarcity of local data on the burden of Alzheimer's disease (AD), that ultimately impacts QoL (Mahmoud et al., 2018).

Balaha et al. (2023) investigated the health-related quality of life (HRQOL) and drug prescribing patterns in acute coronary syndrome (ACS) patients at Riyadh hospitals in Saudi Arabia. Other influential work by Abou El-Soud et al. (2020) examined the relationship between HRQOL and the burden among family caregivers of elderly patients undergoing hemodialysis in Saudi Arabia. Participants were selected from the King Abdullah Medical Complex in Jeddah between September and November 2019 using a convenient nonprobability sampling technique (Murshid et al., 2020). However, most influential studies are based on the medical profiles of participants, as opposed to local community-based studies (Canc Educ, 2018).

Table 3 shows the relationship of studies and involvement within the community and more specifically, the QoL of elderly people in community settings. These studies are based on both interventions such as quantitative and qualitative phases. It is evident that there is a gap in the literature for the identification of the QoL of elderly people living in Taif City. Most of the reputable community-based studies in Saudi Arabia are performed after 2015. The selection criteria in this study is based on a full decade leading up to 2023 but the articles identified only cover the past five years rather than the full decade. Older research could provide important and interesting information on how practices and perceptions around QoL have evolved over time. However, Bryson (2012) suggested that studies conducted more than five years previously and not including recent research could indicate that up-to-date reviews are not being undertaken.

The purpose of previous studies is to build a foundation for new investigations and to help with identifying further gaps. Therefore, the extracted data from the 15 articles identified in this study, could provide a solid foundation for future research investigating the QoL of elderly people living in Saudi Arabia.

Table 3 Data extraction based on selected articles

Total number of articles	Authors	Title	Years of Publication	Origin/country of origin (where the source was published or conducted)	Aims/purpose
1	The Economist: Baily, et al. (2020)	Shifting Demographics: A Global study on creating inclusive environments for aging population	2020	London/ Published on G20 Countries	To address active and inclusive aging in 19 countries
2	Imran, et al (2019)	Assessment of quality of life (QoL) in breast cancer patients by using EORTC QLQ-C30 and BR-23 questionnaires: A tertiary care center survey in the western region of Saudi Arabia	2019	King Abdul Aziz University, Jeddah, Saudi Arabia	The study is aimed at assessing the quality of life in a cohort of breast cancer patients at the Oncology Department, King Abdulaziz University Hospital (KAUH), King Abdulaziz University (KAU), Jeddah, Saudi Arabia (SA), and to differentiate QoL among different groups

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Table 3 (continued)

Total number of articles	Authors	Title	Years of Publication	Origin/country of origin (where the source was published or conducted)	Aims/purpose
3	Mahmoud, et al. (2019)	Assessment of Quality of Life among Medical Students in Saudi Arabia: A Study Based on WHO-QOL-BREF Protocol	2018	College of Medicine, Al-Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia	The purpose of this study was to assess the quality of life-based on WHO-QOL-BREF protocol among medical students studying in Riyadh, Saudi Arabia
4	Almuzani et al., (2018)	Health-Related Predictors of Quality of Life in Cancer Patients in Saudi Arabia	2017	Saudi Arabian cancer patients are a priority at King Abdulaziz Medical City (KAMC), Riyadh, Saudi Arabia	The aim of this study was to identify the predictors of the QoL in a sample of Saudis with cancer
5	Altamimi et al., (2016)	Healthy aging conceptualizations in Saudi Arabia: a systematic review	2016	University of Hail, Saudi Arabia	The aims of the study was to achieve its objectives by seeking answers to the following research questions: (1) How do older populations of cultures and religions similar to the Saudi Arabian culture experience their aging processes? (2) What are the influences that are positively related to healthy aging in the context of cultures and religions similar to Saudi Arabia?

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Table 3 (continued)

Total number of articles	Authors	Title	Years of Publication	Origin/country of origin (where the source was published or conducted)	Aims/purpose
6	Firdos & Aman ullah, (2020)	Healthy aging in the context of physical and mental health: a systematic review of the elderly population in Saudi Arabia	2020	Department of Clinical Neurosciences College of Medicine, King Faisal University, Al-ahsa, Saudi Arabia	This systemic review aim is to understand the concept of healthy aging and mental health of the elderly through various concerns of physical health and mental health, lifestyle as physical activity and quality of life
7	Khan et al, (2017)	Nexus Between Demographic Change and Elderly Care Need in the Gulf Cooperation Council (GCC) Countries: Some Policy Implications	2017	GCC & Middleast	The paper aims to explore the population aging within the context of social policies designed by the stakeholders. Furthermore, the paper acknowledges the early stages of demographic changes taking place within the region
8	Bindawas et al, (2018)	Knee pain and health-related quality of life among older patients with different knee osteoarthritis severity in Saudi Arabia	2018	Department of Rehabilitation Sciences, College of Applied Medical Sciences, King Saud University, Riyadh, Saudi Arabia	The research aims to determine the Health-related quality of life (HRQoL) in Saudi Patients suffering from osteoarthritis and Medical problems

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Total number of articles	Authors	Title	Years of Publication	Origin/country of origin (where the source was published or conducted)	Aims/purpose
9	Mirza et al, 2019a, 2019b	Medicines policy issues for Saudi Arabia: priorities and mode	2019	Saudi Arabia	The aim of the study is to integrate public policy, medicine and healthcare
10	Saudi General Authority for Statistics, 2021	Population Estimates in the Midyear of 2021	2023	Saudi Arabia	According to estimates by the General Authority for Statistics – a decrease of 2.6% compared to mid-2020, when the total population stood at 35.0 million
11	Al-surmi et al., (2019)	Quality of life among home healthcare patients in Saudi Arabia: household-based survey	2019	Saudi Arabia	The overall aim of this study was to describe and assess the quality of life (QOL) and associated determinants among patients enrolled in the Home Health Care (HHC) program affiliated with the Ministry of National Guard Health Affairs in Riyadh, Saudi Arabia
12	UNICEF (2019)	MENA GENERATION 2030 COUNTRY FACT SHEET	2019	UNICEF Headquarters and regional office for the Middle East and North Africa	The Aim of the document was to highlight health service provision in Saudi Arabia

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Total number of articles	Authors	Title	Years of Publication	Origin/country of origin (where the source was published or conducted)	Aims/purpose
13	Alenezi et al, (2022)	Ostomy-related problems and their impact on quality of life of Saudi ostomate patients: A mixed-methods study	2022	Saudi Arabia	The aim of this study is to explore the health-related quality of life outcomes and ostomy-related obstacles among patients with ostomy in Saudi Arabia
14	Aladel et al, (2023)	Effect of Weight Self-Stigma on Quality of Life and Dietary Habits among Adult Students in Riyadh, Saudi Arabia	2023	Riyadh Saudi Arabia	this study aimed to examine the effect of WSS (Weight Self-Stigma) on the quality of life and dietary habits among adult students
15	Alatawi et al, (2023)	The prevalence of migraine headache among the general population and its impact on quality of life in Tabuk city, Saudi Arabia	2023	Tabuk city, Saudi Arabia	The aim of this study was conducted to estimate the prevalence of migraine in Tabuk and QoL

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
19 countries (comprising the G20 and excluding the EU) are included in this analysis: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the UK and the US. These were selected to broadly represent the world: covering roughly 65% of the population and 75% of global GDP	The methodology for the index, developed by The Economist Intelligence Unit (EIU), including category and indicator definitions, scoring criteria, and data sources	Qualitative indicators	Old age dependency graph prediction from 1950 till 2050	The outcomes of this report are split between countries focused on greater policies for the aging population compared with countries having less focused policies on aging population	No G20 country is fully prepared to support healthy, financially secure, socially connected older people

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
The selected population for the study is the Arab population compared with the European population who recovered from breast cancer and their QoL	Categorical variables were used in this study. Kruskal Wallis and Mann–Whitney tests were used for non-parametric tests	Survey-based study (qualitative) was carried out in the Oncology Department at KAUH and	Data collection took 4 months. Cohorts of patients being treated at KAUH were asked to fill the questionnaire in Arabic or English language	The importance of QoL in breast cancer patients and the scarcity of data from Saudi Arabia, especially from the Western region, this study was conducted to assess the QoL in breast cancer patients by using EORTC QLQ-C30 and BR23 questionnaires in the western region of Saudi Arabia. The present study investigated the QoL in a cohort at the Oncology Department, KAUH, Jeddah, SA, and differentiated QoL among different groups and also explored the association of different variables with the domains of QoL	The breast cancer patients who visited the institute had a better quality of life regarding overall global health status as well as functional and symptom scales. Patients scored highest in social functioning and lowest in physical functioning. Insomnia and fatigue were the most disturbing symptoms. Similarly, patients scored better on the functional scale (QLQ-BR23), body image and future perspective. Hair loss and systemic therapy side effects were the most disturbing symptoms. Future studies can be performed keeping in view specific problems in detail

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
Total 983 male medical students from different academic years participated in this study voluntarily out filled their questionnaires for QoL	Demographic samples were defined and Cronbach's α-coefficient was calculated to determine the consistency. Bivariate analysis was done to delineate factors associated with total and domain scores using independent samples t-test or ANOVA. The QOL of the study sample was then compared using one-way ANOVA and student's t-test according to different years, accommodations and age groups. Post-hoc tests were then used to make multiple comparisons between different groups. The criterion of significance was set at $p < 0.05$	The data for quality of life was collected by a well-designed questionnaire as prescribed by the WHO-QOL-BREF which includes questions pertaining to different domains for the quality of life	A cross-sectional study was conducted among medical students at the College of Medicine, Al-Imam Muhammad Ibn Saud Islamic University, Riyadh during the year 2014	Two instruments were used for data collection: • A socio-demographic questionnaire to obtain information on age, hometown location, interest in the area of study, confidence in career development • The Arabic version of the WHOQOL-BREF questionnaire based on a brief version of the World Health Organization Quality of Life Instrument (WHOQOL-BREF)	The study conclusions were that the medical students had a decreased QoL. Students who lived with family led to an improvement in the QoL in some domains. There is a need for psychological support for students living alone and those in the middle of their medical courses

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
A cross-sectional study was conducted on 438 patients with a variety of cancer types (145 breast, 109 colorectal, 38 leukemia, 45 lymphoma, and 99 other types) who attended the Oncology Outpatient Clinics at KAMC	540 subjects who consented were given the survey, and 436 surveys were completed and returned (145 breast, 45 lymphoma, 109 colorectal, 38 leukemia, and 99 other types of cancer) with a response rate of 80.7%. Sociodemographic data of participants such as age, gender, height, weight, university degree, marital status, regular exercise, family support, and employment status and clinical data were also included	A survey study was conducted in the outpatient oncology clinics, KAMC, Ministry of National Guard Health Affairs	The data analysis was conducted using IBM SPSS Statistics 23 (SPSS, Chicago, IL). Patients' characteristics: sample statistics such as means and standard deviation were used to summarize numerical data	Quality of life was assessed by the Medical Outcomes Study 36-item short-form (SF-36) questionnaire, an instrument with an Arabic version and established reliability that provides a subjective evaluation of QoL	The effectiveness of exercise must be assessed in Saudi cancer patients as an intervention to improve QoL

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
A systematic review of the healthy aging conceptualizations in Arab-Muslim cultures was conducted to identify gaps in the evidence base. A systematic review of healthy aging studies was conducted to critically evaluate the quality of the evidence by comparing it to the STROBE (Strengthening the Reporting of Observational studies in Epidemiology) statement checklist	Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) flow diagram for conducting systematic reviews, literature searches were carried out in the following databases: Medline, PubMed, PsycInfo, Jstor, Sociological Abstracts, Social science information journals, Arabic language journals (via Google Scholar) and specifically the Journal of Cross-Cultural Gerontology	This systematic review could not find any studies that specifically focused on the concepts of healthy or successful aging in Arab-Muslim societies as seen in other published studies in the area. The articles either deal with demographic epidemiological outcomes such as well-being or health status (a measure of healthy aging) or examine living conditions, attitudes to care, or social integration. Most of the studies reviewed were surveys and only one study was qualitative	Most of the included studies examine the aging perspectives of the immigrant Arabs or older Arab Israelis. However, there are sporadic studies in Saudi Arabia, Egypt, the United Arab Emirates, and Lebanon. Most of the studies from the immigrant Arab focused on the nature of aging and the social networks and social relationships. Also, these studies remark on the role of religion and culture in the aging process of Arab-American elders, with social integration playing a big part in an older person's perception of healthy aging	In-depth analysis of the studies revealed that the selected studies were primarily cross-sectional in nature, based on small population-based studies that included older adults and were not specifically designed to investigate the healthy aging perspectives. Studies primarily collected data via self-reported surveys. Based on the findings of the systematic review, no research has examined the question of how older people themselves understand the concept of healthy aging in Saudi Arabia	There is a growing public health interest in understanding and promoting healthy aging worldwide, though the research into aging and healthy aging in the context of an older Saudi population has received little to no recognition in the literature. Therefore, one of the main strengths of this review is that it is the first review that seeks to explore older Saudi's perspectives of healthy aging concepts in Saudi Arabia. Other strengths are that the outcomes resulting from this study can contribute to the process of developing policies and programs for the older Saudi population

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145 papers were identified from the different databases, 52 duplicates were removed, 16 articles were excluded because of the non-availability of full text, and 57 papers were removed as did not meet the eligibility criteria. Finally, 20 papers were included and further assessed	The significance of this systematic review is to understand the concept of healthy aging of elderly people in Saudi Arabia by the evidence of physical and mental health along with the lifestyle changes and quality of life components. With this goal, the relevant articles have been reviewed through various databases and been selected, followed by PRISMA guidelines to answer the following questions: a) Physical health of elderly people in Saudi Arabia, b) Mental health status of elderly people in Saudi Arabia, c) Lifestyle as physical activity of elderly people,d) Healthy aging and quality of life of the elderly population in Saudi Arabia	Searches of peer-reviewed papers related to the topic were conducted through different databases using Scopus, PubMed, Web of science, and Google Scholar. Studies were included on the basis of eligibility criteria explaining the aging (i.e., concept of healthy aging) of the elderly population of Saudi Arabia	1. Identification: 145 papers were identified from the different databases 2. Screening: 52 duplicate papers were removed, and 16 articles were excluded because of the non-availability of full text and 57 papers were removed as did not meet the eligibility criteria 3. Eligibility: 20 papers were included and further assessed	145 papers were identified from the different databases, 52 duplicates were removed, 16 articles were excluded because of the non-availability of full text, and 57 papers were removed as did not meet the eligibility criteria. Finally, 20 papers were included and further assessed	The evidence of the review suggests that health issues, mental health, and well-being as well as the quality of life of the elderly population that has a strong relationship with healthy aging. The stigma perception in the Saudi population toward mental illness was also reported. Additionally, depression and anxiety, the mental health issues or psychiatric problems of the elderly population in Saudi have not been widely studied

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	The demographic variables such as age distribution of populations, total fertility rates, life expectancies at birth and socio-economic variables including education, labor participation and human development indices were examined in order to develop the scenario analysis for the GCC elderly population		Secondary sources of information from GCC official statistics were taken from 1950 to 2050	The outcomes of the study are declining trends in fertility combined with increased life expectancy in the Arab world. Due to the early stages of the policy agenda, the implications are challenging and demand urgent and wider focus from community stakeholders	The factual information of GCC shows an increase in life expectancy and stat pension still very low compared with other countries around the world. The article highlights the lack of government policy toward the aging population in the coming years

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
209 consecutive males and females aged > 55 years with radiographically diagnosed knee OA from five hospitals across Riyadh, Saudi Arabia	HRQoL were assessed using the pain visual analogue scale (VAS) and the 36-Item Short Form Health Survey (SF-36). Descriptive statistical stratified and sample t-tests were used	Multicentre cross-sectional study	Study conducted between March 2016 and March 2017 on participants from five different hospitals in Riyadh, Saudi Arabia	Saudi Patients with Knee OA and knee pain had reduced HRQoL compared with patients having moderate knee conditions	HRQoL was evaluated using the reliable and valid Saudi Arabia version of the 36-Item Short Form Health Survey (SF-36), a generic, self-administered, and patient-reported outcome measure. It consists of 36 items in 8 domains that assess the patient's physical and mental status. Future studies at the national level are necessary to measure the functioning, disability, and health of this patient population

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
This article describes the need to build a conceptual model and the future directions for medicine policy in the country. The model is needed to narrate and document the set of challenges regarding workforce, professional development, and human and health services for the pharmaceutical and medicines sector. A conceptual model could aid to build and identify priority medicines policy issues	The variables identified in the study are major challenges to health care such as an aging population, sedentary lifestyles, growing demand for healthcare services and changing disease patterns. Furthermore, there is a change in disease patterns from communicable to non-communicable diseases in Saudi Arabia	Thematic Analysis		Modern health issues have emerged due to an affluent society, the adoption of modern diets and the lack of physical activities. Both the prevalence of cardiovascular diseases and the share of the population with diabetes have increased. Some of the other challenges are poor referral systems between primary care centers and hospitals: long waiting time, underutilization of e-health and information systems and the accessibility of healthcare services in remote regions of Saudi Arabia affecting QoL	The interaction between all stakeholders such as the Saudi healthcare system and policy makers could lead to identify future health gaps. This could well fit with identify our study questions on the QoL of the elderly living in Saudi Arabia

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
the population numbers increased in KSA from 34,2 million in 2019 to 35,0 million in 2020, 2021 saw a decline in the overall population numbers to 34,1 million in midyear 2021	The new methodology applied by GASTAT estimates the population by age groups, in addition to other attributes such as sex and nationality. The estimation is based on the component of demographic change, including births, deaths, and net migration	In line with international standards and best practices, GASTAT applied for 2021, for the first time, a population estimation methodology – the so-called cohort component method - making best use of information from different data sources, including administrative data on births, deaths and international migration	No-Intervention used as this is only Saudi Stats document	The Saudi population increased by 1.2% in mid-2021 compared to mid-2020. In the same period, the non-Saudi population decreased by 8.6%. In 2021, the Saudi population accounted for 63.6% of the total population, with non-Saudis at 36.4%	The document falls into PCC JBI farmwork as it discusses about the population, context and culture

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
253 patients included and the Mean age was 67.05 (± 20.0)	Logistic regression models were fitted to determine factors associated with QOL low score	This cross-sectional study was conducted among patients enrolled in the HHC program. The World Health Organization QOL questionnaire (WHOQOL-BREF) was used to collect data about the different domains of patients' QOL. Logistic regression models were fitted to determine factors associated with QOL low score	The overall QOL for HHC patients was significantly affected by both socio-demographic and morbid characteristics. In the final Multivariate logistic regression models, marital status, and having psychological problems, stroke and number of illness were independently associated with the overall QOL of HHC patients	The overall QOL and its domains are significantly associated with several different factors. Many of these factors can be monitored and enhanced by improving the quality of HHC services, thus improving the QOL of patients	This study used the WHOQOL-BREF to assess the four main domains of QOL (physical, psychological, social, and environmental) of HHC patients. We conclude that QOL domains are affected by many different factors, and our results show that some factors affect more than one domain (e.g., psychological problems and stroke)

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Number of total population and adolescents (10–19 years), 2015, 2030 and 2050 (in millions)	N/A	N/A	N/A	N/A	Government health expenditure is determined by growing population and requires the increase in total health expenditure to even maintain the status quo
Completed survey instruments were obtained from 421 participants across the five sites, representing an 88.5% (421/500) response rate	City of Hope Quality of life questionnaire (COH-QOL-OQ) Arabic version was used in this study. Originally COH-QOL-OQ developed by Grant and Davis (1997) (Grant et al., 2004)	This mixed-methods study was undertaken through survey (COHQOL-Q Arabic version) for collecting the quantitative data (n = 421) and semi-structured interview for collecting qualitative data (n = 12). This study employed STROBE and GRAMMS checklists		Multiple health-related quality of life challenges were indicated by Saudi patients with intestinal stomas. Ostomy surgery interferes with religious practice in Muslim people, particularly observing Hajj worship and fasting for Ramadan	The study findings reported a greater understanding of challenges that patients with stoma experience in Saudi Arabia. The process of the adaptation and the change of their lifestyle also affects patient's quality of life. The healthcare providers can use the study results to create a supportive intervention strategy that is needed to maximize QOL for people with stoma

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
385 students from Riyadh universities participated and The average age of participants was 24 ± 6.74, and the majority were female (78.4%). The study duration was between September 2022 and February 2023	cross-sectional study and completed three online questionnaires: the WSS questionnaire, the WHO quality of life questionnaire, and a dietary habit questionnaire	According to the independent samples t-test, there was no significant difference in the QOL mean scores between males and females. No significant difference between the QOL and educational level was observed. However, as shown by one-way ANOVA, there was a significant difference between QOL and BMI categories	After the enrollment consent section, participants were asked to answer demographic data questions (as the first section of the questionnaire) which included: questions about age, sex, nationality, educational level, name of the university studied at, marital status, monthly salary, place of residence, weight, and height. Followed by The WHO Quality of Life (WHOQOL)-BREF, which was created to assess QOL,	The results demonstrated a negative association between all QOL domains and WSS ($p < 0.001$). Moreover, higher BMI is associated with increased self-devaluation and fear of enacted stigma ($p < 0.001$). There was also a negative link between both quality and quantity of food with WSS ($p < 0.01$)	No significant difference was seen in study outcomes concerning gender. The findings of this study suggest the importance of increasing awareness about the negative impact of WSS and developing social policies to prevent or decrease it. Additionally, multidisciplinary teams, especially dietitians, should be more aware of WSS when dealing with overweight and obese individuals

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Population and sample size within the source of evidence (if applicable)	Methodology	methods	Intervention type, comparator and details of these (e.g., duration of the intervention) (if applicable). Duration of the intervention (if applicable)	Outcomes and details of these (e.g., how measured) (if applicable)	Key findings that relate to the scoping review question/s
The general population of Tabuk city was estimated population size of adults was 667,837, the study sample size was 384	This cross-sectional study included a sample from the general population in Tabuk City, Saudi Arabia. A structured questionnaire was utilized to collect the participants' data. It comprised questions about the socio-demographic characteristics of the participants and the experienced headaches, the ID Migraine questionnaire and the Migraine specific quality of life questionnaire	Data were obtained through an online, structured, self-administered questionnaire created using Google Forms. The survey was disseminated to the community using social media platforms such as Twitter, Instagram and WhatsApp. The questionnaire was prepared in Arabic and consisted of 34 questions asking about the participants' demographic data (e.g., age, sex and income), characteristics of migraine (3 ID migraine test) and the disease effect on the participants' quality of life (the Migraine specific quality of life questionnaire)	Categorical variables were summarized as counts and percentages and Pearson's Chi-Square test for independence of observations or Fisher's exact test were used to assess the association between the type of headache and relevant variables. The Chi-square test for trend was used when one variable was ordinal (e.g., rating of the MSQ 2.1 questions) and the other was categorical (e.g., the type of headache). The score of the MSQ 2.1 was summarized as the median and interquartile range (expressed as the 25th–75th percentiles). A p-value	The prevalence of Migraine headache in population in Tabuk city was high and consistent with current literature. Since quality of life is affected in these patients, efforts should be made to promote and support public awareness and health education of migraine headache	Health awareness of the public about the characteristics, relieving factors, and treatment of migraines would elevate and improve patients' quality of life

6 Conclusions

The scoping review of the QoL of elderly people living in Taif, Saudi Arabia, has mapped emerging literature and identified gaps for further systematic reviews. The primary question was developed based on a semi-structured interview study of retired elderly people in Taif. The review methodology was constructed for each stage, keeping in mind that the identified reviews may evolve. Therefore, the stages mentioned above are not limited but are a general summary of the process used in the scoping literature review on the elderly population of Taif, Saudi Arabia.

The overall quality of life (QoL) in Saudi Arabia and its domains are significantly associated with several different factors determined by urbanization. Many of these factors can be monitored and enhanced by improving functional capacity, which leads to greater physical autonomy, independence, improved cognition, self-efficacy, satisfaction, and positive feelings. Therefore, improving the QoL of the elderly population is based on aging, which is a complex, multidimensional process. All these factors are significant milestones identified in this scoping review of the quality of life (QoL) of elderly people living in Taif, Saudi Arabia. However, there remains a need to identify further gaps through the conduct of higher-level studies that engage all stakeholders at the community level. The participation of stakeholders is fundamental to addressing disruptive changes in family norms and the QoL of elderly people living in the GCC region.

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