# Appendix 1. Charting the Selected Articles Based on Their Characteristics

Methodologies included literature review, cross-sectional, qualitative, experimental, and validation studies. Experimental studies consist of both randomized control trials and quasi-experimental investigations; we included validation studies as a portion of the selected articles aimed to validate self-management questionnaires in Iran. The charted data is provided in the supplementary material

Title	Authors	Chronic Disease Under Investigation	Methodology	Self- Management Type	Key Findings
Diabetes in old age, a review	Ahranjani A, Tabataei-Malazy O, Pajouhi M	Diabetes	Narrative Review	Engagement with Health Promoting Activities	1. Highest incidence of type2 diabetes is among people above 60 in rural areas of Isfahan 2. Changes in pharmacokinetics makes type 2 diabetes treatment harder in older adults 3. Self-care is one of the most important aspects of type 2 diabetes management 4. knowledge on the symptoms, diagnosis, hyper and hypoglycemia, early warning signs, prevention, control, treatment modalities, use of glucometer, appropriate timemanagement are the main factors to be taught to caregivers and diabetic older patients 5. Facilitated through 3 fundament als: nutritional changes, physical activity and medications 6. HbA1C Assessment every 6 months is an effective approach to diabetes management
				Communication with Healthcare Providers	
				Physical Health	

Application of the Health Belief Model in Promotion of Self-Care in Heart Failure Patients	Baghianmoghadda m MH, Shogafard G, Sanati HR, Baghianmoghadda m B, Mazloomy SS, Askarshahi M	Heart failure	Experimental	Communication with Healthcare Providers  Integration into	1. Lack of knowledge of risk factors (38% did not know about HF and 43% did not know about disadvantages of salt consumption) 2. HBM model was proven to be an effective intervention to promote and raise knowledge in heart failure patients 3. Severe educational needs in this population (considering that they were from a urban area) 4. The 40-minute video helped participants understand the severity of their disease better 5. Suggests that HBM could be a potential educational framework to raise awareness among heart failure patients
				Daily Social	
"I am not living my life" Lived Experience of Participation in Everyday Occupations After Stroke in Tehran	Fallahpour M, Jonsson H, Joghataei MT, Nasrabadi AN, Tham K	Stroke	Qualitative	Roles Integration into Daily Social Roles  Communication	1. Three main themes: Inability to continue daily activities as before, Change of personality, Perception of "not living life"  2. Sub-categories included losing former everyday routines, incapability of acting and deciding, losing former roles, senseless body, re-defining their personality, and re-defining their social life  3. The importance of family was emphasized in empowering them to get back into the community.  4. Rehabs and families should collaborate  5. Being socially active and determining self-identity are two elements that rehabs should prioritize
				with Healthcare	
				Providers	

Living with cardiac resynchronization therapy: Challenges for people with heart failure	Dehghanzadeh S, Varaei S, Kheirkhah J	Heart Failure	Qualitative	Integration into Daily Social Roles	1. 5 themes: Fear of implantation, panic of receiving a shock, lack of control over life, healthcare system incompetency, and psychological coping 2. Participants identified religious beliefs as the most effective coping strategies; moreover, they thought having social groups would help significantly 3. The article suggests more educational programs by health professionals regarding the implantation, a clear explanation of the indications and function, shape, size, and positioning of the CRT, more financial support, and predictions of long-term needs
				Communication with Healthcare	
				Providers Physical Health	
		CRT		Monitoring Mental Health	
A Population-Recod	Borhaninejad V,	Diabetes	Cross-	Monitoring Engagement	1. 67.37% of th participants had
A Population-Based Survey to Determine Association of Perceived Social Support and Self- Efficacy With Self- Care Among Elderly With Diabetes Mellitus (Kerman City, Iran)	Shati M, Bhalla D, Iranpour A, Fadayevatan R	Diapetes	sectional	with Health Promoting Activities	poor adherence to diabetic self-care behaviors, 29.14% were average, and only 13 patients (3.49) had good self-care compliance  2. Highest self-efficacy for foot care and lowest for physical activity  3. Lack of physical activity in 68.4% of the patients 4.51.3% not following a diabetic diet 5. Higher education and lower age as significant factors in better self-care 6. In order to promote physical activity, public group workouts (e.g. Yoga) might be effective 7. Social support was another potential factor to enhance self-efficacy/care 8. Found a significant relationshop between self-efficacy and self-care 9. Overall suggested policies that facilitate mass education, informal social cohesion sentiments, and motivational programs

The relationship between the spiritual attitude of the family care givers of older patients with stroke and their burden	Chafiri RT, Navabi N, Shmsalinia A, Ghaffari F	Stroke	Cross- sectional	integration into Daily Social Roles	1. Caregiving burden was significantly higher in older participants, females, and those who have been supporting their patients for a longer time 2. The patients social and mental health was in a relationship with caregivers' burden 3. Negative correlation between spiritual attitude and the burden
				Mental Health	
Self Care Behaviors among Elderly with Chronic Heart Failure and Related Factors	Kamrani A, Foroughan M, Taraghi Z, Charati JY	Heart failure	Cross- sectional	Monitoring Engagement with Health Promoting Activities	1. Physical activity was done the least practiced self-care (96.2%) followed by flu shot (89.7%) and weight monitoring (80.5%) 2. Taking medication(94.6%), contacting physicians in case of shortness of breathe (84.4% (and adherence to low diet (83.7%) were practiced the highest. 3. Lower self-efficacy among younger older adults (60-75) than older participants (75-90) 4. Proposes further interventions/research on targeting both clinical and age-related characteristics 5. Examples include: Regular hearing, visual, cognitive assessment, Educational brochures with large fonts, providing enriched environments, motivational sessions, supervision and social support for both caregivers and patients
				Communication with Healthcare Providers	
				Physical Health Monitoring	

The Relationship between Life Satisfaction with Social Support and Self-efficacy in Community-dwelling Ederly in Sari, Iran, 2012	Bagheri Nesami M, Sohrabi M, Ebrahimi MJ, Heidari-Fard J, Yanj J, Golchimehr S	General	Cross- sectional	Integration into Daily Social Roles	1. Lack of physical activity in 64.3% of the participants 2. Inverse correlation between life satisfaction, self-efficacy and number of chronic diseases 3. Overall, high life satisfaction among the older adults 4. Financial support and social support enhanced both self-efficacy and life satisfaction
				Mental Health Monitoring	
Sexuality and Elderly with Chronic Dise ases: A Review of the Existing Literature	Merghati-Khoei E, Pirak A, Yazdkhasti M, Rezasoltani P	General	Narrative Review	Integration into Daily Social Roles  Communication	1. Hypertension, chronic kidney disease, diabetes, myocardial infarction, heart failure, multiple sclerosis, Parkinson's, rheumatoid arthritis were among common diseases with an impact on the elderly's sexual dysfunction  2. The corresponding drugs to these diseases, such as beta blockers and diuretics have a significant impact on the elderly's sexual function or self-esteem of the individuals  3. Some of above diseases are associated with erectile dysfunction, decreased libido or lower physical functioning  4. Overall, development of consulting, training and empowerment programs for seniors with CDs are recommended to enhance their sex life  5. Need for more qualitative studies to explore the patient' experiences
				with Healthcare Providers	
				FIOVIGEIS	

Evaluating the Effect of Knowledge, Attitude, and Practice on Self-Management in Type 2 Diabetic Patients on Dialysis	Ghannadi S, Amouzegar A, Amiri P, Karbalaeifar R, T ahmasebinejad J, Kazempour- Ardebili S	Diabetes	Cross- sectional	Engagement with Health Promoting Activities	1. Gender, marital status, and place of residence was not correlated with the KAP scores 2. However, higher duration of diabetes lower education, smoking, and hypertension were associated with lower scores 3. Emphasis on the importance of knowledge and education on disease and health 4. This lack of knowledge was speculated to lead to the high negative attitude among the patients (62.5) 5. Suggested to invest on proper patients education
				Physical Health Monitoring	
				Communication with Healthcare Providers	
Impact of Pharmacist Intervention on Appropriate Insulin Pen Use in Older Patients with Type 2 Diabetes Mellitus in a Rural Area in Iran	Forough AS, Esfahani PR	Diabetes	Experimental	Physical Health Monitoring  Communication	1. Only 44.2% of the patients had received instructions previously 2. A significant decline occurred after the intervention (487 to 182) 3. While HbA1C levels were not influenced by the intervention, FBG levels were significantly declined 4. Despite the significant decline, the rates of the medical errors remained considerably high which implies the need for effective educational programs on the usage of pens 5. The largest error was multiple use of the insulin pens 6. Further research to assess the effectiveness and sustainability of pharmacist-led education interventions on safe insulin pen use
				with Healthcare Providers	

The Effectiveness of Occupational Therapy Supervised Usage of Adaptive Devices on Functional Outcomes and Independence after Total Hip Replacementin Iranian Elderly: A Randomized Controlled Trial	Bozorgi ASJ, Ghamkhar L, Kahlaee AH, Sabouri H	Total hip replacement	Experimental	Engagement with Health Promoting Activities	1. Significant decrease in the WOMAC and the VAS scores were observed while the BI was increased significantly 2. Considering that in Iran and many othereastern countries, people sit on the floor by deep squatting, such nations are at a higher risk for surgery failure by inducing deep hip flexion. 3. Overall such intervention manifested to be an effective tool in the improvement of physical function and independence within the window of 6 weeks. 4. Additionally this educational intervention intrigued the caregivers to learn more about the disease and provide better care
Health Promotion Behaviors and Chronic Diseases of Aging in the Elderly People of Iranshahr*-IR Iran	Mofrad ZP, Jahantigh M, Arbabisarjou A	General	Cross-sectional	Engagement with Health Promoting Activities	1. Those older adults with chronic diseases seemed to follow health promotion activities more than those who were not suffering from such diseases. The authors speculate that this is due to the fact that these adults see doctors more often and receive the necessary education.  2. High health promotion habits were shown to be correlated with age as well. Younger elderlies were more active in performing health promotion behaviors such as low salt diet, non-smoking, and physical activity 3. Statistically significant relationship bet ween health promotion behaviors and literacy 4. Overall, the authors suggest more educational programs particularly for those who are currently healthy but entering the later stages of life.

Self-care and Its Pre dictors in Patients With Chronic Heart Failure in Western Iran	Siabani S, Driscoll TR, Najafi F, Leeder SR	Heart failure	Cross- sectional	ENgagement with Health Promoting Activities  Physical Health Monitoring	1. Approximately, more than two thirds of the participants had I or more heart failure risk factors including diabetes, hypertension, or smoking.  2. Patients did not have satisfactory healthcare  3. Highest self care habits were adherence to medicine, avoid getting sick, and calling doctor/nurse for guidance respectively  4. Physical activity and low salt consumption were practiced the least  5. Self-care maintenance was negatively associated with age  6. Self-care maintenance was positively associated with the duration of disease  7. More research on the self care of co-morbid individuals needs to be taken
				Monitoring Communication with Healthcare Providers	
Physical Activity among a Sample of Iranians Aged Over 60 Years: An Application of the Transtheoretical Model	Salehi L, Eftekhar H, Mohammad K, T aghdisi MH, Shojaeizadeh D	General	Cross-sectional	Engagement with Health Promoting Activities	1. 70% of the participants were categorized as sedentary (<1 hr/week exercise) 2. Top 3 reasons for participation in PA were to meet new people, to have fun, and to contact friends. 3. Laziness, lack of company, and depression were the top 3 barriers 4. Exercise knowledge, benefits, and self-efficacy are identified as the main predictors of PA 5. Education was not in a significant relationship with PA 6. Need to implement educational programs
Elderly self- management: a qualitative study	Ravanipour M, Salehi S, Taleghani F, Ali Abedi H	General	Qualitative	N/A	Hopefulness, managing their goals, independence, health management, being able to share their experiences, and having insight towards future were the main elements that defined selfmanagement for the participants

Does Islamic spiritual program lead to successful aging? A randomized clinical trial	Moeini M, Sharifi S, Zandiye Z	Hypertension	Experimental	Physical Health Monitoring	1. There was a significant enhancement In the quality of life and general health at each of the three points within the experiment group; this difference was not significant in the control group 2. The intervention enhanced the mental health of the participants 3. The mean life satisfaction was significantly higher in the experiment group immediately after and 1 month after the intervention 4. This low cost intervention is recommended to enhance the mental health of the morbid older adults
Fruit and Vegetable Consumption among Community Dwelling Ederly in an Iranian Population	Sabzghabaee AM, Mirmoghtadaee P, Mohammadi M	General	Cross- sectional	Engagement with Health Promoting Activities	1. Significant positive correlation between fruit and vegetable consumption and level of education 2. While the the consumption of fruit and vegetables is higher among Iranian older adults in comparison some other developing countries, the consumption rate is still below WHO's standards
Translation and Validation of the Self-care of Heart Failure Index Into Persian	Siabani A, Leeder SR, Najafi F, Driscoll TR	Heart failure	Validation	Physical Health Monitoring	The correlation between indicators and loaded constructs were significant     The coefficient alpha was slightly higher than the original questionnaire

In vestigating the Facilitators and Barriers of Physical Activity among Older Adults in Tehran	Salehi L, T aghdisi MH, Ghasemi H, Shokroush B	General	Cross- sectional	Engagement with Health Promoting Activities	1. Gender and age had significant correlation with the extent of physical activity (females and older adults worked out less)  2. Only 23.5% of the participatns had been physically active for the past 6 months  3. Laziness (62%), lack of companion (49%), and depression (30.75) were the main barriers  4. Enhancing social interaction were the most common facilitators followed by better sleep, losing weight, enhancement of flexibility, and improving mental health  5. Higher knowlesge of phyiscal activity was also significantly correlated with more active lifestyle
Factors associated with self-care agency in patients after percutaneous coronary intervention	Saeidzadeh S, Darvishpoor Kakhki A, Saeedi JA	Coronary Artery Diseases	Cross- sectional	Engagement with Health Promoting Activities	1. Most patients had high level of self care agency (72%) 2. No significant relationship between age or gender AND self care agency 3. Income (higher income) and marital status (married people) were the only factors that were associated with self-care agency
The Relationship between Older Adults Nutrition and Cardiovascular Diseases	Dorosty AR, Alavi AM	General	Cross- sectional	Engagement with Health Promoting Activities	Chance of obesity was significantly higher among women     Diabetic older patients were at a much higher risk of obesity than the non-diabetic ones
The elderly perception and views on their health - Facilitating and in hibiting factors in elderly health care in Iran: a qualitative study	Abedi H, Mostafavidarani F, Mohd-Riji H	General	Qualitative	N/A	Seven categories were identified concept of health, lifestyles, spiritual belief, personal and family factors, economic and social factors, healthcare services factor, and supportive context.     The participants indicated that they received three main types of support: affective, instrumental, and informational     Shortage of health staff was noted as a major problem

Study of the self-care age ncy in patients with heart failure	Daryasari GM, Karkezloo NV, Mohammadnejad E, Vosooghi NM, Akbbari Kagi M	Heart failure	Cross- sectional	Engagement with Health Promoting Activities	1. 62.5% of participants had at least another type of chronic illness 2. Moderate self-care ability was observed among the participants 3. Lower class of heart failure was associated with higher self-care 4. Married and younger participants were better in terms of self-care 5. Income and self-care ability had a significant relationship 6. Planned training to promote self-care behaviors by nurses is recommended
				Communication with Healthcare	
The effect of community health nurse home visit on self-care self-efficacy of the elderly living in selected Falavarjan villages in Iran in 2010.	Hosseini H, Torkani S, Tavakol K	General CDs	Experimental	Providers Engagement with Health Promoting Activities	1. 66.7% had more than 1 chronic disease 2. home visits increased the self-efficacy score of the participants significantly
				Communication with Healthcare	
				Providers Mental Health	
Self-Efficacy among Iranian Nursing Home Residents	Torki Y, Haji- Kazemi E, Bastani F, Haghani H	General	Cross- sectional	Monitoring N/A	Being male and younger was positively correlated with higher self-efficacy scores     High demands for educational interventions for both the patients and the health professionals     Nurses have a crucial role as they interact with the older adults the mostfurther research should be done on the nurses' effective educational interventions
The Relationship between General Health and Religious Coping in Elderly Residing at Homes	Heydari-Fard J, Bagheri-Nesami M	General	Cross- sectional	Mental Health Monitoring	1. While general health was not significantly correlated with religious coping, depression was in a significant correlation 2. The above observation is justified by the fact that religion and spirituality are the common effective strategies that are especially used by the elderly to help them improve their psychological well-being.

The Effect of Family-Centerd Empowerment Model on the Quality of Life in Elderly People	Masoudi R, Soleimani MA, Hashemi-Nia AM, Qorbani M, Pour Dehkord AH, Bahrami N	General CDs	Experimental	Mental Health Monitoring	1. The interventions, through 10 sessions in 3 months, resulted in a significant increase in the life satisfaction of the older adults.  2. Such intervention could result in significant physical and mental improvements in the elderly  3. This intervention could potentially enhance the quality of life of the caregivers as well.  Therefore future research could be looking into that.  4. Emphasis on the fact that families could provide optimal care for their family members with minimal stress as long as they are
Self-efficacy and Care giver Stress among those Who Provide Care to Nursing Home Residents with Dementia	Shahbalaghi FM	Dementia	Cross- sectional	Mental Health Monitoring	1. The need for health education on caregiving was indicated as the main requirement 2. Females, non-employed caregivers, those who did not live with the patient, single participants, and those who had previous education caregiving had the highest self-efficacy scores. 3. Overall, the article emphasized on the importance of the caregivers' health
The Effectiveness of an Educational Nutrition Program for a Nursing Home's Employees in Tehran	Ghasemi S, Sharifi F, Maghsoud-Nia S, Teimoori F	General	Experimental	Engagement with Health Promoting Activities	1. Albumin, Hemoglobin, HDL, and Hematocrit were increased significantly while LDL and fasting blood glucose was reduced significantly 2. The nutritional status of the residents was in a significant negative correlation with swallowing. Polypharmacy, and age. 3. The articles recommended to implement a regular teaching protocol where the knowledge and skill set of the nurses/trainees are regularly evaluated

Social Issues among the elderly's care givers in Karaj	Babaei M	General	Cross- sectional	Mental Health Monitoring	1. Females spent the highest amount of time on caregiving 2. 82% of the families believed that the level of social issues for them is medium to high 3. 94% indicated medium to high financial problems
The Study of the Relationship Between Health Promoting Behaviors on the Level of Everyday Life Activities and Daily Living Activities with Tools in the Elderly West of Tehran, 2007	Habibi-Sola A, Soghari N, Rezaei M, Haghani H	General	Cross-sectional	Integration into Daily Social Roles	1. The majority of the participants claimed to be able to perform ADLs (93.4%) and IADLs independently (71.5%) 2. Not smoking, avoiding alcohol, and controlling blood pressure were the most prevalent healthy habits 3. Lack of flu shot reception was the most prevalent unhealthy behavior (only 0.7% had received it) 4. Significant correlation bet ween physical activity consumption of dairy products), consumption of meat, consumption of fruits and vegetables, and consumption of low-salt and fat foods and high ADL was found.
				Physical Health Monitoring	
				Engagement with Health Promoting Activities	

Facilitators and Barriers to Family Caregiving at Home: Experience of Female Caregivers	Mohammadi F, Dabaghi F, Nikroush M	Demntia	Qualitative	Mental Health Monitoring	1. The facilitators and barriers were divided into individual, family and social factors 2. Individual facilitators involves knowledge of caregiving, caregiver's and the patient's personality, and caregiver's past experiences 3. Individuals barrier was working outside of home 4. Family facilitator: past living experiences with the patient, quality of their relationship, and support from other members of the family 5. Social/Extemal factors: involved formal support, homecare, and the overall healthcare 6. Low income, lack of formal education on caregiving, low number of geriatricians and geriatrician nurses and lack of home-care were the main extemal barriers that participants expressed 7. Education was an important factor both on the individual and external level
		General			
Investigating the Correlation between Family Support and Blood Glucose Management Among Diabetic Older Adults	Heidari S, Nouri Tajer M, Hosseini F, Inanlou M, Gol- Giri F, Shirazi F	Diabetes	Cross- sectional	Physical Health Monitoring	1. Negative correlation bet ween HB1AC and family support 2. No relationship between demographic info. And the level of family support 3. High income, being married, and higher education were significantly correlated with better glucose management 4. The importance of the family role was emphasized in this article
Reliability of Pass in Evaluating the Self-	Shamsedinni A,			Daily Social Roles	
Care Skills of Parkinson Patients	Karimi H, RahimZade Akbbar S			Physical Health	

Analysis of Iranian Elder Patients from Myocardial Infarction	Afrasiabi A, Hassani P, Khoshknab M, Yaghmaei F	Coronary Artery Diseases	Qualitative	Mental Health Monitoring	1. Three main themes were recognized: living with fear, limited lifestyle, and hardships of returning to normal daily life 2. Fear of death, fear of dependency are the types of fears they experienced 3. Independence, positive thinking, self-control, self-care, and mainting a high confidene were the keys to return to the daily life 4. The authors emphasize that older patients experience coronary artery diseases alongside the decline in their physical strength and exacerbation of their symptoms. The geriatric symptoms not only add to the physical complication of their disease, but also weakens them mentally. 5. Importance of the education was emphasized; both for the caregiver and the patient
		Myocardial infarction		Integration into Daily Social Roles	
EFFECT OF FISH OIL ON SERUM LEVELS OF LIPID PROFILE, LIPOPROTEIN (A), APO LIPOPROTEIN A-1 AND B, FASTING SUGAR AND INSULIN, AND INSULIN RESISTANCE IN THE ELDERLY RESIDENTS OF KAHRIZAK CHARITY FOUNDATION	Fakhrzadeh H, Ghaderpanahi M, Sharifi F, Akbbari Kamrani AA, BadamchiZadeh Z, Larijani B	General	Experimental	Engagement with Health Promoting Activities	1. Improvements were observed but none of them were significant 2. Authors speculate that the low-doses are not as effective and high doses are needed to make a significant difference 2. Authors speculate that the low-doses are not as effective and high doses are not as effective and high doses are needed to make a significant difference

Facilitators of Higher Fruit and Vegetable Consumption among Older Adults in Iran	Salehi L, Eftekhar Ardebili H, Mohammad K, Taghdisi MH, Shojaeizadeh D	General	Cross-sectional	Engagement with Health Promoting Activities	1. Higher education and income had a significant correlation with higher vegetable consumption 2. Financial barriers (55.5%) was seen as the main obstacle to higher consumption of fruits and vegetables. 3. 98% were unaware of the recommended servings by the Iranian Ministry of health, and 90% did not know what constitutes one serving. 4. The author suggests that by providing public educational sessions, the consumption of fruits and vegetables will increase significantly 5. Also social support was significantly correlated with higher consumption of fruits and vegetables
				Communication with Healthcare Providers	
Evaluation of effective motivators and barriers of physical activity in the elderly	Nejati V, Kordi R, Shoaei F	General	Cross- sectional	Engagement with Health Promoting Activities	1. Maintaining health was the main facilitator followed by gaining self-confidence, and avoiding fatigue 2. Chronic diseases, frailty, pain, and air pollution were the main barriers to the elderly working out 3. Educating patients regarding the benefits of physical activity on their weaknesses and frailty could be helpful
The Effect of Client- Centered Occupational Therapy on the Self- Care Satisfaction and Performance of Older Adults With Cerebrovascular Accidents	Ghavami M, Akbari Kamrani AA, Sarafraz Z, Fallahpour M, Rahgozar M	Stroke	Experimental	Integration into Daily Social Roles	1. Followed by the intervention, no significant improvement in self-care was observed in comparison with the control group 2. Low sample size is considered as one of the potential reasons
Validity and Reliability of CHAMPS Physical Activity Questionnaire for	Sahaf R, Shams A, Fadaye Vatan R, Delbbari A, Sabour M, Mirzaei M, Rasafiani M	General	Validation	Engagement with Health Promoting Activities	

Older People Living in Tehran					
				Physical Health Monitoring	
The Relationship of Physical Activity and Risk Factors of Coronary Artery Diseases among Iranian Older Men	Rahmani Ghobadi M, Hosseini R	Coronary Artery Diseases	Cross- sectional	Engagement with Health Promoting Activities	Physical activity had a significant negative correlation with total cholesterol, triglyceride, LDL, BMI, waist circumference and positive correlation with HDL 2. Overall physical activity is correlated with lower coronary artery diseases risk factors in older adults     Educational programs on the benefits of physical activity and adequare exercises tailored to older adults could be very helpful
Effects of Horicultural The rapy on Self- Esteem and General Health of Nursing Home Residents in Iran	Dehmani Z, Hokmi M, Kraskian Moujembari A	General	Experimental	Engagement with Health Promoting Activities	1. While the control group's self-efficacy and general health did not improve throughout the study, a significant improvement was observed among the experimental group in both of the indexes.  2. It is speculated that this enhancement is due to the psychological effects of being out, the physical demand of gardening, and giving the participants a sense of independence/efficacy
				Integration into Daily Social Roles	
The Effect of Low and Moderate Intensity Aerobic Exercises on Self- Concept in Older Adults	Akbari Kamrani A, Shams A, Abdoli B, Shamsipour Dehkordi P	General	Experimental	Engagement with Health Promoting Activities	Significant improvement in the experiment group's self-efficacy was observed.     Tukey test indicated that low physical activity improves self-efficacy significantly in comparison with the control group while moderate physical activity enhances self-efficacy significantly in comparison with the other two groups.

Design and Psychometric Proper es of a Self-Care Ques onnaire for the Elderly	Hemmati Maslapak M, Hashemlo L	General	Validation	Physical Health Monitoring	1. This validated questionnaire is a reliable, short, and simple tool that could enable nurses and other health professionals to measure the extent of self0-care and selfefficacy in their older patients.
				Integration into Daily Social Roles Mental Health Monitoring	
The Effect of Resistance Training on Vascular Endothelial Growth Factor (VEGF) in Older Women	Behjati A, Bbabaei A, Faramarzi M	General	Experimental	Engagement with Health Promoting Activities	Significant decrease in the experiment group's endothelial growth factor after the intervention
The Effect of Educational Intervention on the Promotion of Physical Activities of the Ederly Men in Qom City: Applicatioon of Trans-theoretical Model	Karimi Z, Majlesi F, Tol A, Foroushani AR, Sahaf R, Aligol M, Mohebbbi S	General	Experimental	Engagement with Health Promoting Activities	Significant increase in the prevalence of the experiment participants in the maintenance group     At the end of the intervention, none of the participants remained in the pre-contemplation group     Self-efficacy was also increased significantly in the intervention group     Average physical activity was increased in the experiment group as well

Perception of Healthy Lifestyle among Iranian Eders: A Qualitative Research	Foroughan M, Mohammadi Shahbolaghi F	General CDs	Qualitative	Integration into Daily Social Roles	1. Following health guidelines, avoiding trauma, fulfilling social roles, having a social life, having a good quality sleep, stress control, secondary prevention of disease, continuing daily routines, being physically active, healthy diet, leisure time, spirituality, being cognitively active, and overall finding meaning in life were the main elements of a healthy lifestyle in the eyes of the participants 2. Prevention of diseases was equivalent to a healthy lifestyle to most of the participants 3. Authors infer that Iranian older adults find health as more of an individual trait. As a result, they usually focus on individualistic means to reach health 4. It is evident that many older adults are aware of what constitutes a healthy lifestyle as their opinion matches with global guidelines. However, there might not be enough resources for them to facilitate a healther lifestyle among older Iranians
				Mental Health Monitoring	
				Physical Health Monitoring	
Effectiveness of Group Cognitive- Behavioral Therapy on Strategies for Coping with Stress of Family Caregivers of Patients with Alzheimer's Disease	Mahmoodi M, Mohammad Khani P, Ghobari Banab B, Bagheri F	Dementia	Experimental	Mental Health Monitoring	1. While the stress level remained the same in all three measurements of the control group, the intervention group managed to show significant decline in their level of stress  2. Significant difference between control and intervention  3. The importance of family and caregiving on the health of patients and their caregivers were emphasized

Examining the Validity and Reliability of the Cardiovascular Disease Ques onnaire in Mea-suring the Empowerment of Elderly Paents to Receive Social Support	Musavinasab SM, Ravanipour M, Pouladi S, Motamed N, Barekat M	Coronary artery diseases	Validation	Physical Health Monitoring	The survey was proven to have high content and face validity     95% reliability     Considering that this survey is tailored to the needs of the Iranian elderly, it could be an effective measure to evaluate other interventions aiming to enhance self-efficacy in the older adults
				Mental Health	
Nutritioonal Status and Its Associated Factors in Elderly With Diabetes, 2015	Doostan F, Safizadeh H, Kazemzadeh H, Reza Asadi M, Delabri A, Borhaninejad VR	Diabetes	Cross- sectional	Monitoring Engagement with Health Promoting Activities	1. The prevalence of malnutrition was significantly higher than males 2. Unemployment and low education were associated with higher chances of malnutrition 3. The longer the patients were suffering from diabetes, the higher were the chances of diabetes 4. Social/family support alongside adequate educational programs could help prevent malnutrition much more significantly among this cohort 5. Normal aging processes alongside geriatrics syndromes are also the factors that result in the loss of apetite and malnutrition
Self-efficacy Among Older Adults in Fereydunshahr City	Aslani M, Mazaheri MA, Batavani M	General	Cross- sectional	N/A	Having one or more chronic conditions was associated with lower self-efficacy scores     In comparison with the literature, self-efficacy of older Iranians was moderately lower     Investing on educational health-promoting interventions would be helpful
A Structural Equation Model of Self-care Activities in Diabetic Elderly Patients	Alavi M, Molavi R, Eslami P	Diabetes	Cross- sectional	Mental Health Monitoring	1. perceived social support, anxiety, and depression predicted the level of self-care in these individuals 2. Stress was not a significant predictor of self care in older adults 3. Future studies should take into account how these three factors contribute to self-care for practicsal purposes

The Empowerment of Elderly Patients with Chronic Obstructive Pulmonary Disease: Managing Life with the Disease	Fotokian Z, Mohammadi Shahbbolaghi F, Fallahi-Khoshknab M, Pouradib A	Chronic Obstructive Pulmonary Disease	Qualitative	Communication with Healthcare Providers	1. Three main themes: living abreast life, preparation for battle with disease, helping to stabilize the elder's life 2. First theme focused on information seeking, trusting the healthcare providers, gaining independence, enhancing psychocosial health 3. Second theme was divided into three subcategories too a. Using effective techniques b. Accepting the role of family in providing care c. Development of knowledge and professional skills 4. Role of caregivers was foreshadowed a. Cooperation w/ professional team members b. Providing support for the elderly c. Improved patient care skills 5. Highlighted that older adults with chronic obstructive pulmonary disease struggle with self-regulation 6. Patients were lost and were not aware of their roles in the society/community
				Mental Health	
Effectiveness of Diabetes Self- Management Education on Quality of Life in Diabetic Elderly Females	Kargar Jahromi M, Ramezanli S, Taheri L	Diabetes	Experimental	Monitoring  Mental Health Monitoring	Mild complication with diabetes management could have significant effects on their quality of life     Patient xelf care is crucial     Interventions that focused on self-care and showed significantly improved results     Its

Concept Analysis of Empowerment in Old People with Chronic Disc ases Using a Hybrid Model	Fotoukian Z., Shaboulaghi FM, Khoshknab MF, Mohammadi E	General	Qualitative	Integration into Daily Social Roles	1. There are several significant attributes to self-care including: a "active participation", "informed change", "knowledge to problem solving", "self-care responsibility", "presence of client competency", and "control of health or life"  2. Their qualitative part of research resulted in discovering that "awareness promotion", "sense of control", "development of personal abilities", "autonomy" and "coping" are significant factors to empower patients to engage in self-care  3. Lack of communication with healthcare professionals, including nurses, result in the patients' lack of knowledge of healthy behaviors, such as maintaining a healthy diet  4. Physical abilities and autonomy involve several dimensions such as maintaining physical, mental, social, and spiritual health  5. Enhancement of patients' social engagement by religious and spiritual beliefs  6. Social engagement is encouraged through group activities  7. Interaction with health professionals was encouraged as well
			Narrative Review	Communication with Healthcare Providers	
				Mental Health Monitoring	
				Engagement with Health Promoting Activities	

Family Functioning and Depression in Family Caregivers of People with Dementia  Biglarian A  Dementia  Dem	Consumption of Fruit and Vegetables among Elderly People: A Cross Sectional Study from Iran	Salehi L, Eftekhar H, Mohammad K, Tavafian SS, Jazayery A, Montazeri A	General	Cross- sectional	Engagement with Health Promoting Activities	1. Low overall Fruit and Vegetable consumption 2. Significant correlation bet ween fruit and vegetable consumption and education, age (older adults consumed more), marital status, economic status, and BMI, 3. No significant difference bet ween males and females 4. 97% of the participants did know about the necessary intake 5. Knowledge, Perceived benefits, barriers, and support from family members were significant predictors of fruit and vegetable consumption among older adults 6. Much lower consumption of fruits and vegetables than recommended by WHO
Family Functioning and Depression in Family Caregivers of People with Dementia  Biglarian A  Dementia  Cross-sectional  Cross-sectional  Monitoring  Mental Health Monitoring  2. 70.1% were suffering from chronic conditions themselves 3. 58% of the caregivers expressed depressive symptoms 4. Length of caregiving, financial situation, and satisfaction from caregiving were significantly correlated with the extent to which caregivers expressed depressive symptoms 5. Higher rates of depressive symptoms in comparison with caregivers for other chronic						
and Depression in Family Caregivers of People with Dementia  Mohammadi Shahboulaghi F, Rahgoi A, Bbiglarian A  Mohammadi Shahboulaghi F, Rahgoi A, Bbiglarian A  Mohammadi Shahboulaghi F, Rahgoi A, Bbiglarian A  Monitoring receive any training in dementia caregiving 2.70.1% were suffering from chronic conditions themselves 3.58% of the caregivers expressed depressive symptoms 4. Length of caregiving, financial situation, and satisfaction from caregiving were significantly correlated with the extent to which caregivers expressed depressive symptoms 5. Higher rates of depressive symptoms in comparison with caregivers for other chronic					Worthornig	
and Depression in Family Caregivers of People with Dementia  Mohammadi Shahboulaghi F, Rahgoi A, Bbiglarian A  Mohammadi Shahboulaghi F, Rahgoi A, Bbiglarian A  Mohammadi Shahboulaghi F, Rahgoi A, Bbiglarian A  Monitoring receive any training in dementia caregiving 2.70.1% were suffering from chronic conditions themselves 3.58% of the caregivers expressed depressive symptoms 4. Length of caregiving, financial situation, and satisfaction from caregiving were significantly correlated with the extent to which caregivers expressed depressive symptoms 5. Higher rates of depressive symptoms in comparison with caregivers for other chronic						
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	and Depression in Family Caregivers of People with	Mohammadi Shahboulaghi F, Rahgoi A,	Dementia			receive any training in dementia caregiving 2.70.1% were suffering from chronic conditions themselves 3.58% of the caregivers expressed depressive symptoms 4. Length of caregiving, financial situation, and satisfaction from caregiving were significantly correlated with the extent to which caregivers expressed depressive symptoms 5. Higher rates of depressive symptoms in comparison with caregivers for other chronic

Validation of the Persian Translation of the Swallowing Disturbance Questionnaire in Parkinson's Disease Patients.	Rajaei A, Azargoon SA, Nilforoush MH, Barzegar Barfrooei E, Ashtari F, Chitsaz A	Parkinson	Validation	Physical Health Monitoring	1. Sensitivity of SDQ was 96.7% 2. Specificity of SDQ was 91.2% 3. The positive predictive value (PPV), the negative predictive value (NPV), and the pre- and posttest probabilities of aspiration were 0.67, 1, 16.9%, and 66.7%, respectively.
				Communication with Healthcare Providers	
Caregiver Burden and Its Determinants Among the Family Members of Patients with Dementia in Iran.	Abdollahpour I, Noroozian M, Nedjat S, Majdzadeh R	Dementia	cross- sectional	Mental Health Monitoring	1. About 60% of the caregivers were housewives, and 24.2% were employed 2. Burden on the caregiver was reported to be moderate to high among 50% of the participants 3. Patients dependence on caregivers for daily activity living, gender, and education were significantly related to caregiver burden 4. Higher education, being a first degree family member, and number of caregivers were significantly correlated with lower caregiver burden 5. Education of the caregivers on the disease is very significant
				Communication with Healthcare	
				Providers Physical Health	
General Self-Efficacy among Family's Female Caregiver of Elderly with Alzheimer's disease	Bastani F, Ghasemi E, Negarandeh E, Haghani R	Dementia	cross- sectional	Monitoring Physical Health Monitoring	1. 65.2% of the participants scored lower than "satisfactory levels" on the self-efficacy questionnaire, GSE-10 2. Educational and socio-economic status were significantly correlated with self-efficacy of the caregivers 3. Overall need to enhance the self-efficacy of caregivers to enhance the patients and their health
The Impact of Spiritual Care Education on the Self-Efficacy of the Family Caregivers of Elderly People with Alzheimer's Disease	Salamizadeh A, Mirzaei T, Ravari A	Dementia	Experimental	Physical Health Monitoring	The experiment group demonstrated a significantly higher scores on the GSE scale. Spiritual care could enhance the health of caregivers and patients simult aneously

Self-Efficacy and Caregiver Strain among Caregivers of Older Adults with Alz heimer's Disease	Shahbalaghi F	Dementia	cross- sectional	Physical Health Monitoring	1.52% of the caregivers lived with the patients 2.53% were satisfied with providing care to the patients 3.36% rated their health as poor and 35% self-reported a mental illness 4. Education on caregiving was identified as their most important need 5. Caregivers prioritized provision of mental support followed by personal care
				Communication with Healthcare	
Effectiveness of Participation in Alzheimer Disease Care giver Social Support Groups on Spiritual Health and Care giver Strain	Mohammadi F, Bbabaei M	Dementia	Experimental	Providers Physical Health Monitoring	Caregiver stress declined steadily over time     All the participants were satisfied by the social support program and expressed their enthusiasm towards continuing their participation in the program
				Mental Health Monitoring	
Effect of Mindfulness Program on Caregivers' Strainon Alzheimer's Disease Caregivers	Hosseini MA, Mohammadzaheri S, Khoshkkenab M, Mohammadi Shahbbolaghi F, Soltani PR, Sharif Mohseni M	Dementia	Experimental	Mental Health Monitoring	Caregiver strain reduced significantly in the intervention group
				Physical Health Monitoring	
Validity and Reliability of the Persian Version of Lawton Instrumental Activities of Daily Living Scale among Patients with Dementia	SoltanMohammadi Y, Hassani Mehraban A, Taghizadeh G, Akbbarfahimi M, Alahyari F	Dementia	Validation	Physical Health Monitoring	High construct validity in 6 items and moderate validity in the remaining 2     High reliability (inter-rater coefficient of correlation of 96%
				Communication with Healthcare Providers	
Adjustment of Optimal Sports Site Select on Criteria for Elderly Using Analytical Hierarchy Process and Geographic Information System	Jamshidi O, Doostipasha M, Razavi SMH, Gudarzi M	General	Cross- sectional	Engagement with Health Promoting Activities	1.46% of the older adult participants reported spending less than 6 hrs per week on PA2. Accessibility to PAC, saftey, topographical characteristics, and density of PACs around were criteria
			Narrative Review		
			Qualitative		

Determining Psychometric Properties of Iranian Active Aging Measurement Instrument	Mohammadi E, Allahyari T, Darvishpoor Kakhaki A, Saraei H	General	Validation	Communication with Healthcare Providers	1. Existential functionalism, the management of home affairs, the initial strategies of isolation aversion (interaction and lack of isolation), social participation (professional role- playing, voluntary activities, in institutional social participation), physical dynamics, and insight-learning dynamics were revealed as active aging components that indicated the existence of mental, behavioral, and objective dimensions of active aging. 2. Mean content validity score was high (0.9606) 3. Cronbach's α coefficient was 0.876 4. Pearson's was 0.951 5. Inter-cluster correlation 0.996
			Qualitative	Physical Health Monitoring Mental Health	
				Monitoring Integration into Daily Social Roles	
The Effect of a Resistance Training Course on Blood Pressure and Nitric Oxide Levels in Elderly Women	Ardakani Ab, Qassemian A, Koushki M, Shakour E, Mehrez A	Hypertension	Experimental	Engagement with Health Promoting Activities	Significant increase in plasma     NO after the resistance training     Significant decrease in diastolic     and systolic blood pressure
		Coronary Artery Diseases			
The Relationships between Self-Concept and Self-Efficacy with Self-Management among Elderly of Sanatoriums in Tehran	Kahe M, Vameghi R, Foroughan M, Enayatollah B, Bbakhtiyari V	General	Cross- sectional	N/A	1. Higher Self-concept and self- efficacy were significantly correlated with better self- management
Effect of Eight- Weeks Aerobic Training on Serum Levels of Nitric Oxide and Endothelin-1 in Overweight Elderly Men	Mohammadi R, Fathei M, Hejazi K	Coronary Artery Diseases	Experimental	Engagement with Health Promoting Activities	Significant decrease in body weight variables including weight, BMI, fat composition, and endothelin-1
-		Hypertension			Significant increase in Nitric Oxide

Effect of Family- Based Empowerment Model on the Self- Eficacy of Hypertensive Elderly People	Hedayati B	Hypertension	Experimental	Engagement with Health Promoting Activities	The elderly's self-esteem score was increased significantly in both a week and 6 weeks past intervention     Educational workshops were recommended for future works
				Communication with Healthcare Providers	
Perceptions of People Living with Parkinson's Disease: A Qualitative Study in Iran	Soleimani MA, Bbastan F, Negarandeh A, Greyson R	Parkinson	Qualitative	Integration into Daily Social Roles	Losing previous social status was one of the main concerns; many participants were afraid of becoming dependent on their family membebrs and caregivers
				Mental Health Monitoring	
				Physical Health Monitoring	

## **Appendix 2. Search Procedure**

## a. Complete List of Keywords and MeSH Terms

- 1. Chronic Diseases: chronic diseases, non-communicable diseases, cancer, neoplasms, hypertension, stroke, chronic conditions, diabetes, heart disease, asthma, obstructive pulmonary disease, dementia, Parkinson disease, amyotrophic lateral sclerosis, multiple sclerosis, and arthritis.
- 2. **Disease Self-Management:** self-management, self-care, self-administration, self-help, self-efficacy, patient education, patient compliance, health promotion, health education.
- 3. Older Adults: aged, aging, senior, older adult, elder, geriatric, gerontology, frail older adults.

### 4. **Location:** Iran.

It is important to note that we chose specific types of chronic conditions based on Center for Disease Control (CDC) and WHO definition of chronic disease (1,6). Furthermore, considering the global burden of chronic neurological disorders, we decided to also consider any

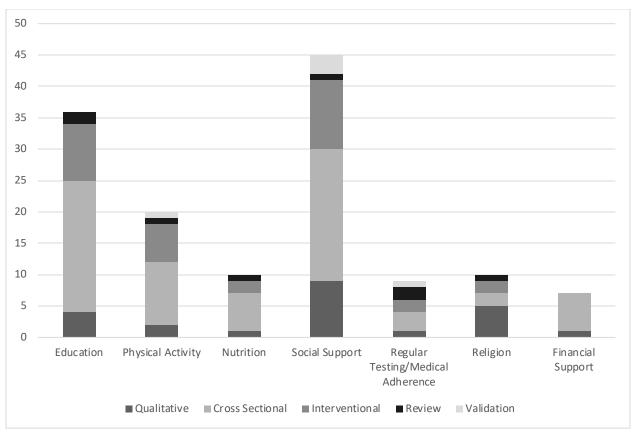
such condition with a higher prevalence among older adults, including stroke, dementia, Parkinson Disease, multiple sclerosis, and amyotrophic lateral sclerosis.

In this study, we defined older adults as individuals who are either older than 60 years of age or those who are suffering from geriatric syndromes, frailty, and/or co-morbidity of chronic diseases. The age of 60 was chosen to expand the sample size as the investigators were aware of the limited scope of the field under study in Iran. The exclusion criteria were articles that were not written in English or Farsi, lacked a predominant focus on CDSM, and those studies that did not focus on older adults who reside in Iran.

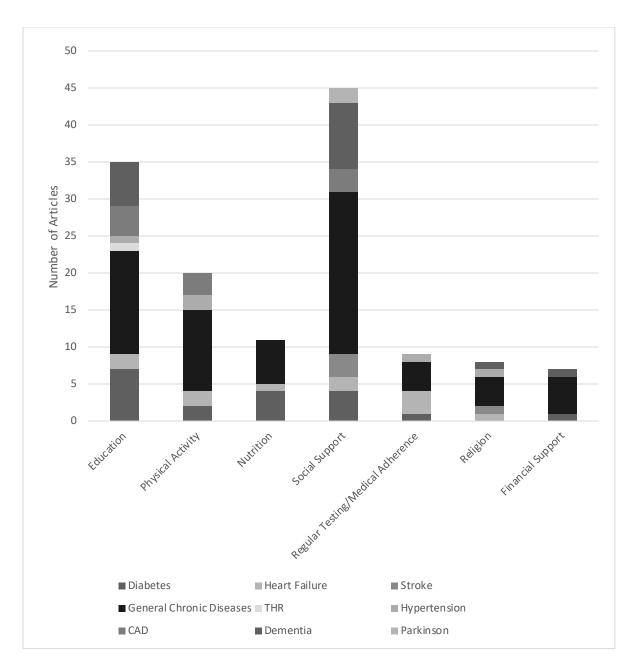
### b. Search Criteria for PubMed/MEDLINE

(chronic disease[mesh] OR chronic disease\* [tiab] OR Hospitals, Chronic Disease [mesh] OR non-communicable [tiab] OR noncommunicable [tiab] OR chronic illness\*[tiab] OR chronically ill [tiab] OR cancer [tiab] OR neoplasms [mesh] OR hypertension [mesh] OR hypertension[tiab] OR stroke [mesh] OR stroke [tiab] OR chronic condition [tiab] OR diabetes [tiab] OR diabetes mellitus [mesh] OR heart diseases [mesh] OR heart diseases [tiab] OR asthma [mesh] OR asthma [tiab] OR obstructive pulmonary disease [tiab] OR pulmonary disease, chronic obstructive [mesh] OR arthritis [mesh] OR arthritis [tiab] OR Dementia [mesh] OR Dementia [tiab] OR Alzheimer Disease [mesh] OR Alzheimer Disease [tiab] OR Alzheimer's Disease [tiab] OR Parkinson Disease [mesh] OR Parkinson Disease [tiab] OR Multiple Sclerosis [mesh] OR Multiple Sclerosis [tiab] OR Amyotrophic Lateral Sclerosis [mesh] OR Amyotrophic Lateral Sclerosis [tiab]) AND (self management [tiab] OR self care [mesh] OR self care [tiab] OR self administration [mesh] OR self administration [tiab] OR self help [tiab] OR self efficacy [mesh] OR self efficacy [tiab] OR patient education [tiab] OR patient compliance [mesh] OR patient compliance [tiab] OR patient education [tiab] OR health promotion [mesh] OR health promotion [tiab] OR health education [mesh] OR health education [tiab]) AND (aged [mesh] OR ageing [tiab] OR aging [mesh] OR senior\* [tiab] OR older adult\* [tiab] OR elder\*[tiab] OR geriatric\* [tiab] OR gerentol\* [tiab] OR frail [tiab] OR frail older adults [tiab]) AND (iran\*[tiab] OR iran[mesh])

# Appendix File 3. Intersection of Themes with Methodologies and Chronic Conditions



Appendix Figure 1: Distribution of Methodologies across the Main Themes in CDSM



Appendix Figure 2: Distribution of Diseases under Investigation across the Main Themes in CDSM