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REVIEW ARTICLE

Theoretical Perspectives of Hospitalized Older Patients and Their Health-Related Problems and Quality of Care: Systematic Literature Review

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Abstract:

Introduction:

The proportion of aged people is growing worldwide. Older persons are affected by a number of physical, psychological and social factors that influence their health and quality of life. These factors are usually multiple and are often masked by sensory and cognitive impairments.

Purpose:

The purpose of this study was to examine the available literature emphasizing older persons' care, care-related problems, and older persons' quality of healthcare. Also, the paper aimed at exploring the future direction of research needs.

Results:

Good quality older patients' care involves safety, professional interventions, recognition and management of physical and emotional wellbeing. Care of older patients requires addressing the aging process itself, the expected decrease in functionality, and diminished cognitive ability. Little statistical data were found to address the quality of hospitalized elderly patients in particular as well as study on healthcare facilities and nursing homes. Literature does not provide much guidance to the effectiveness of care strategies.

Conclusion:

The results assert that elderly health care is a priority. However, health care systems are not specific about elderly patients' needs, leading to low quality of elderly care. There is a need to use an integrated model of care to improve the quality of life and quality of care provided to hospitalized older patients.

Keywords: Elderly people, Elderly healthcare problems, Integrated model of care for elderly, Quality of life for elderly.

1. INTRODUCTION

Over years, human life expectancy has progressively increased. In 2012, around 810 million people were at age of 60 years or older [1]. Older population who are 65 years old and above is expected to increase from 14% to 20% by the year 2051. Ageing is the time of increased vulnerability to biological, psychological and social problems. Ageing is also assumed to associate with physical and mental health deteriorations [2]. Older persons lose their independence and their ability to carry their daily living activities independently as a result of the limited mobility and frailty that require long-term care [3]. Furthermore, studies showed that psychological problems such as depression, anxiety, and cognitive impairment are more common among older persons in terms of prevalence and incidence. However, quality of health

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services provided to older people including their functional status is one of the main challenges to health care systems in the developed countries, while developing countries are still struggling to meet basic needs for all age groups, neglecting older person's priorities [4].

The quality of life is interpreted as the extent of capacity to carry on activities independently and value health beyond physical status to include security and sense of value and attachment [5]. Older persons usually suffer from complex health needs that they struggle to meet leading to more frequent visits to outpatients units. This probably contributes to further burdens on healthcare system [6]. It is very likely that individuals' susceptibility to chronic diseases and deterioration of neurocognitive functions are increasing with the progression of age [7]. On the other hand, deterioration will probably increase with progression of age, leading to more comorbid diseases such as hypertension or dementia [8]. Deterioration of older persons' cognitive abilities has been associated negatively with independence and ability to perform activities of daily living among older persons [9]. Such deterioration, besides losing the ability to move and being dependent, threatens dignity of older persons [10].

The ageing population has triggered great changes in the social and economic profile [11]. The unpredictable future, diminution in socio-economic provisions, and deterioration of health and capacities of healthcare providers in respect to the rapid development of technology and sophistication of therapeutic intervention have all contributed also to lack of health care for older persons [12]. Older persons should continue to be involved in the community, maintain their value and independence through support, physical, and mental and social wellbeing. This has called for developing new perspective of older persons' care, and enhanced the essentials of primary health care services [13]. Older persons are frequently seen in outpatient settings for chronic illnesses requiring health care professionals to be well-equipped with skills and knowledge to manage their needs. In general, patients with significant functional disabilities are older than 65 years, and are suffering from complex acute and chronic medical problems and have social problems [14]. This forms the inter-correlation between age and biopsychosocial health, informing that older people with health problems require further attention and particular health care policies and plans.

The purpose of this study was to examine the available literature emphasizing older persons' care, care-related problems, and older persons' quality of healthcare. Also the paper aims at exploring the future direction of research needs.

2. METHODS

The period of bibliographic search includes published articles from 2000 until 2017. To proceed with an in-depth analysis of theoretical perspectives of hospitalized older patients, their health-related problems and quality of care, a search of the relevant databases was conducted in order to ascertain the existing data concerning the proposed study. In order to review the relevant literature for the study, a systematic approach was utilized. To initiate a search of the literature, it was necessary to propose definitive search terms to aid the overall limit of the literature search. The terms used included health needs of older people, older healthcare problems, integrated model of care for hospitalized older persons, and quality of care for hospitalized older people. Electronic databases that were actively used to aid the literature search for relevant research articles included PubMed, EBSCOhost, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Plus and Google Scholar. The Boolean operators 'AND' and 'OR' were used as functioning connectors, enabling the combination of various search terms in order to help narrow the search to its more specific relevance for the current study. Firstly, using the term 'AND' ensures that different and diverse articles that include the combined search terms are retrieved, whereas using the term 'OR' in the procedure ensures that the retrieval of articles occurs with either one of the search terms that is used. Throughout the implementation of this strategy, extreme care was taken to continuously increase the specificity and sensitivity of the relevant searches. As a consequence, with the aid of these particular Boolean operators, the utilized search terms were duly combined in the following ways: hospitalized older patients AND health care needs OR quality of care outcome and challenges and solutions, quality of health care of hospitalized older patients AND integrated model of care OR care plan, and prevention and reduction of hospitalized older health problems AND older hospitalized acquired related-injury OR emotional wellbeing (Table 1).

2.1. Inclusion and Exclusion Criteria

The inclusion criteria included articles that were published in the English language as well as research studies that related specifically to the older patients' health care needs and their quality of care and quality of life; moreover, the studies that were reviewed focused on the integrated model of care as a number of relevant articles focused on

integrated model of care implementation in hospitals that provide care services for older patients. The inclusion criteria also included articles that were originally published between 2000 up to the present in order to ensure that only current evidence is explored, thereby ensuring that no past evidence that has since been contradicted is incorrectly analyzed. Another aspect of the inclusion criteria involved gathering Jordanian studies published in English language but which were not available electronically. Comparatively, the exclusion criteria that were structured into the search dynamics included different studies that were viewed as not relevant to the terminology and understanding of the hospitalized older patients' quality of care and life as well as studies that had been published in different languages other than English and studies that had been published prior to the year 2000. All studies, qualitative, quantitative, or mixed methods, and systematic reviews were included in the literature review. In total, 131 articles were reviewed and appeared to be relevant. However, after reading all the abstracts, 20 were disregarded, 18 were duplicated, and 12 were not research articles, leaving a total of 81 relevant articles for review. Of these 81 studies, two were qualitative and one was mixed methods.

Table 1. Perspectives of Old Age and Related Issues.

Elderly and Aging	Authors
Ageing is connected to functional deterioration, or a progressive decline of physiological function. "Elderly" is difficult to be defined; however, it is chronologically defined when you are 65 years old and older.	[18]
Those who are 65 to 74 years old are referred to as "early elderly" and those who are over 75 years old are considered "late elderly".	[19]
Older persons are more vulnerable to suffer from different physical and emotional stressors and acquire related injuries such as developing pressure ulcers, falls, or depression	[20]
Hospitalized older patients need extra effort from the healthcare providers due to their complex health care needs	[6]
Older patients must be recognized and accepted as members of society who have the right to have optimal quality of life during their course of illness and to access the healthcare services.	[21]
The functional ability declines in older patients due to the loss of muscle mass and reduced mobility.	[22]
Hospitalized older patients' care needs prevention and promotion to enhance their quality of care and quality of life.	[23]
Emotional care is an essential part of older patients' care plan. It has to include measures that take into consideration the self-value, loneliness, self-value boredom, and isolation	[24]

2.2. Definitions and Perspectives of Ageing and Elderly

According to the World Health Organization (WHO), most world countries have acknowledged the chronological age of 65 years as a definition of 'elderly' or older person. Although there are commonly used definitions of old age, there is no consensus on the age at which a person becomes old (see Table 1). Lacking an acceptable definition contributed to link the term "old" to age at which a person became eligible for occupational retirement. In most of the countries around the world, the ages of 60 and 65 years are commonly connected to retirement and thus used to refer to older persons [15]. The ageing process is a biological fact which is beyond human control. However, it is also exposed to the societal construction that makes the sense of old age. In the developed countries, chronological time plays a paramount role. The age 65 roughly represents retirement age in most countries [16]. In other high-income countries, chronological time has no importance in the meaning of old age; rather, it denotes social meanings of being aged connected to significant roles assigned to older people. However, in other countries, being old is more connected to the loss of roles with signs of decline in physical health status. However, old age in many developing countries is perceived to begin at the point when active contribution in the social life is no longer possible [17].

2.3. Health and Related Problems among Hospitalized Elderly Patients

Hospitalized older patients suffer from hospital-acquired injuries such as falls and pressure ulcers causing them longer stay at the hospitals and risk for further comorbidity [20]. This has caused burden on health care professionals and additional health care expenditure [6]. The cardio-pulmonary and vascular diseases, diabetes and joint problems are the most common prevalent physical health problems among older patients [25]. Older persons, due to age-related factors, suffer from cognitive impairment (40%) and psychological disturbances such as depression and anxiety [6, 26]. At the regional level, no previous studies investigated cognitive impairment, particularly among hospitalized older patients [27]. Few studies have emphasized impact of abuse on physiological and mental health of older persons [28]. Social life and social relationship are one of the main determinants of the quality of life among older patients [29]. In general, healthcare providers, nurses in particular, meet challenges to manage and improve quality of life of older persons. However, autonomy, level of function ability, level of independence, and their social integration and connectedness are among the main issues that health care professionals need to emphasize in their daily care while managing older persons' needs [30].

2.4. Elderlies and Health Access and Utilization

Access to health care services is a challenge to healthcare providers and policy makers throughout the world. Older persons are those who are most vulnerable to issues related to lack of access to health care services. Few studies have actually investigated priorities of health care services needed for older persons, and what factors inhibit or facilitate their access to various forms of health care services [31]. The increased costs of healthcare services in combination with increased demand have contributed to modify options given to older persons needing health care services. In other words, older persons needing advanced health care services are given the option of nursing homes [32]. This led to higher level of dependency among those staying in nursing homes and increased workload of staff [33]. Managing such issues and the increasing health demands of older patients at nursing homes have also mandated nurses to be well equipped with knowledge and skills to manage complex health problems and psychosocial needs [33]. Nevertheless, long-term care also requires care coordination and effective communication. Unfortunately, nurses at long-term care units reported that coordination and communication are not given the priority, causing poor health care outcomes [34].

More studies are needed to tackle unequal access and the quality of care for older people [24]. Previous studies have revealed a reduction in the utilization of secondary and ambulatory care among older people. Despite the increased age with presumed deterioration in health over time, the utilization of care services is not congruent or corresponding to increased health care demands and needs for older persons [35]. Several factors may limit access to care among older persons. Older persons' capacity to convey a need for care and to use healthcare services may hinder access to care when needed. A study showed that an increased dependency in carrying daily activities among older persons is negatively correlated with the utilization of healthcare services [1]. Increased level of dependency among older persons forces them to delegate their needs to others who are not truly aware about their needs, causing access to health care services to be subjective to others' perceptions of care needed [21]. There are other factors that may contribute to lack of access to care by elderly people such as poverty, transportation issues, distance to health care services, availability of specialized care services, health insurance, health beliefs, and health awareness [24]. These factors vary depending on type of health care services: mental, physical, or any other form. A study by Muir-Cochrane and his colleagues showed that attitudes toward mental health problems among older persons and mental health professionals, and availability of resources are considered as main barriers to seek and access mental health care services among older persons [36].

3. IMPACT OF HOSPITALIZATION ON OLDER PERSONS

3.1. Physical Impact

In hospitals, in particular, older persons are the largest consumers of care services also. They are more vulnerable to suffer from different physical and psychological stressors and adverse events like pressure ulcers, falls and loss of mobility [20]. Older persons usually suffer from complex health needs which put extra efforts and burden on healthcare system [6]. Cardio-pulmonary and vascular diseases, diabetes, and joint problems are the common prevalent physical health problems among older persons. Also, the functional impairment increases with increasing age. Cognitive impairment and depression are the most commonly identified psychological problems among older persons [37]. In addition to depression, some studies conducted in developed countries showed that 40% of the elderly suffered from cognitive impairment. However, to researcher's knowledge, no studies have been carried out with regard to the cognitive impairment among older persons in our region like Palestine [38]. Moreover, abuse of older persons is a social hidden problem which is mostly affecting physical and mental health of older persons. Although few studies discussed abuse among older persons, the serious physical and mental health impacts of abuse require attention, further investigation, and protective measures [28]. Mobility and feeling independent increase the feeling of being healthy in relation to older patients' quality of life [39]. Being independent and feeling autonomous mean to an elderly patient the ability to take care of his/her own needs and keep functioning [30].

The physical decline related to age and the loss of functional capacity are related to the loss of muscle mass and reduced mobility and exercise in addition to other determinants of fitness [40]. Thus, there is a need to promote interventions that improve the elderly people's physical capacities and so quality of life. Indeed, promotion of physical activities has a positive role in preventing physical decline [41], and it is a preventive strategy to reduce the risk of chronic diseases. Moreover, cardiovascular mortality significantly decreases among elderly people who are physically active [42]. Evidence also revealed the positive impact of physical activity on degenerative musculoskeletal conditions [43]. In developed countries, they implemented system of quality of care measurement for elderly patients' services. For example, in USA, the elderly hospitals and nursing homes are required to use the Resident Assessment Instrument

(RAI) for assessment and care planning purposes [44]. Quality data are collected through the information technology using certain measures related to older patients. For example, the prevention of falls, development of pressure ulcers, and nutritional status have been used as indicators based on the RAI assessment data. Health care organizations, in general, use patient satisfaction as a tool to evaluate and measure the quality of older patients' care outcome [45]. The goal of the quality measurement system is to ensure that the older patients' care needs are satisfactorily met [46]. The aim of the elderly healthcare facilities is to manage the acute illness concomitant with an enabling environment and social life [47].

One of the major problems confronting hospitalized older patients is pressure ulcers [48]. Increased prevalence of pressure ulcer is associated with the prolongation of life expectancy and the increase in immobility and disability associated with the aging process [49]. The management of pressure ulcers in older patients is different from that in young patients who have spinal cord injury for example. The management and care for older patients should be comprehensive and take into consideration several related factors that are associated with aging-related disabilities, comorbidities and not just focused on the specified therapy [50]. The possible risks for development of pressure ulcer in care facilities because of age and illness are associated with appropriate assessment and application of preventive measures [51]. Training of health care professionals to assess and prevent development of pressure ulcers is an essential factor in reducing the incidence of developing pressure ulcer in hospitalized older patients [52]. Prevention of pressure ulcers is started by identifying patients who are at risk for developing them. Health care organizations use risk assessment tools to assess patients who are at risk for pressure ulcers. Braden scale is one of these tools commonly used in hospitals and nursing homes [53]. The Braden Scale was developed by Barbara Braden and Nancy Bergstrom in 1987 and is the most preferred scale to predict pressure ulcers. This approach is important to prevent the development of pressure ulcer [54].

Another indicator for the older persons' physical wellbeing is fall-down and it continues to be a challenge in health care facilities [55]. Falls are a risky and serious problem for hospitalized patients that reduce quality of life [56]. In fact, among hospitalized patients of all ages and prominently among older patients, falls are an existing problem in hospital settings showing that fall downs are the second most common adverse event during hospitalization [57]. However, accidental fall downs are mostly preventable but they are the most common preventable accidents which decrease the patients' quality of life and increase their healthcare costs [58]. Therefore, the methods of preventive measures for falls should be implemented in the different care settings. The purpose of fall risk assessment is to early identify patients who require preventive measures and to avoid the occurrence of falls [59].

3.2. Emotional Impact

Emotional wellbeing and health are strongly linked at older ages. The aspects of psychological wellbeing are life satisfaction, feeling of happiness, and sense of meaning in life [60]. Researches of older persons indicate that evaluations of quality of life are affected by the state of health, but most findings revealed that average self-reported life evaluation in the elderly people increases with age and suggest that emotional wellbeing is affected by many factors [61]. The change in the emotional status is associated with aging. Socio-emotional selectivity theory (SST) is one of the contemporary theories of adult emotional development. It describes that older people prioritize emotion goals much greater than younger persons. The emotional wellbeing is greater in later life than early adulthood [62]. Thus, the periodic assessment of the psychosocial wellbeing for older persons and in a regular manner is needed [63]. On another side, emotional complexity may indicate emotional maturity, more emotional experiences, and more ability to tolerate mixed emotions [64]. Emotional care for an older person has to include measures that take into consideration the loneliness, self-value boredom and isolation. Sense of Coherence (SOC) Scale is used for older persons who are staying in a hospital. It has association with health-related quality of life (HRQOL) for the elderly [65]. The SOC is a life orientation and it reflects the person's ability both to comprehend the situation and to be able to use the resources for moving toward health promotion [66]. Since SOC measures older patients' emotional status, it can detect the changes in emotional wellbeing post-hospital discharge that indicate depressive symptoms. The health care providers could create and maintain environmental conditions for improvement of the SOC during hospitalization and in primary care of the older patients [67].

3.3. Effectiveness of Integrated Model of Care on Older Persons' Health

The complexities of health conditions of older patients create more need and more efforts to be coordinated among different healthcare settings and services. Several strategies have been developed to meet the increasing needs for them

and to improve the care across all levels from patients' admission until discharge. One of these strategies is the implementation of integrated care model [68]. The projection indicating the fast growing number of older people with decline in their cognitive abilities and the association with other comorbidities inevitably increases the need for elderly services and for effective utilization of available resources to improve the quality of provided services for them [69, 70].

"Integration" of health care services (*e.g.*, physical, mental health, social, and transportation) for disabled or chronically ill patients, especially for the frail older patients, became one of the major concerns for healthcare providers as of the 1990s [71]. There is a growing belief that integrated care strategies offer the potential to improve coordinated care, quality of care outcomes, and efficiency. Integrated model of care in general is one of the ways used to improve the quality and efficiency of hospital care systems. It promotes standardized care procedures and mechanisms based on the best practice services [71]. Integrated system of care for older patients is growing and gaining more interest at international level. Such integrated designs aim to provide comprehensive older patients' care within a system of wide range of services that meet the continuous emerging needs [22]. Implementing integrated model of care generates many benefits. The healthcare providers who are involved in implementing the model will be assisted in reducing variations by identifying patients' needs, ensuring high quality and holistic care. The standardization of procedures and activities will allow healthcare providers to provide effective care during the hospital course of admission [72] [73].

4. DISCUSSION

The literature that has been reviewed for this study highlights the extent of the work that has been undertaken in this field. Much of the work has emphasized the significant integration of care in terms of using and proposing holistic care approach. However, studies were mainly focused on access and utilization rather than improving the quality of care provided. There are also efforts that recommended and tested effectiveness of policies and impacts on health care delivery system. There has been little work concerned with integration across health care professionals, and less attention has been given to quality of services and older persons' perception of health care services. Furthermore, health care outcomes were a significant topic for health care research focusing mainly on physical health indicators rather than biopsychosocial perspective.

The studies showed growing prevalence of population ageing associated with complex health problems. The proportion of elderly people aged 60 or older is growing faster than any other age group. There are increasing studies in the literature suggesting that emotional and psychological wellbeing may even be a protective factor in health, reducing the risk of chronic physical illness [73]. It has also been argued that emotional wellbeing has been addressed in measures of health evaluation and considered in allocating health care resources [74]. As people grow older, they become more susceptible to chronic diseases as well as emotional wellbeing problems, and ageing can increase their frailty [75]. The reviewed literature showed that health care needs of older persons and related factors burden healthcare systems and increase health care expenditure. There were significant efforts to identify and signify health care priorities and needs of older persons. However, these studies did not adequately prioritize challenges, neither did they propose solutions [76]. On the other hand, lack of coordination and ineffective communication among health care professionals has also resulted in unnecessary hospitalizations, increased mortalities, and dependency. Lack of coordination and fragmentation of older persons' care services for hospitalized older patients are addressed in the reviewed literature and proposed as one significant contributor to low quality of older person's care. The literature did emphasize that lack of coordination of older patients' health care services during their hospitalization resulted in fragmentation of care, increased patients' frustration and depressive feelings, and poor communication between patients and health care professionals [22]. The argument whether older persons need more social services than health services resulted in misinterpretation of older persons' needs, leading to low perception of quality of life. Older persons, eventually, do not need unifocal effort, but they rather need an integrated model of care that has physical, psychological and social aspects of care. Moreover, lack of integration and the coordination of care services lead to poor communication between healthcare providers themselves, resulting in low quality of care and poor healthcare outcomes [77]. Studies did assert that older persons do have multiple bio-psychosocial health-related problems. However, lack of integration between health care professionals had contributed to lower perception and inappropriate prioritization of older persons' need. The end result is failure to manage older persons' needs [78].

Another issue is related to older person's hospitalization. Studies showed that hospitalization has negative impact on emotional wellbeing of older persons [79]. This may imply that older persons are probably affected psychologically by hospitalization either due to physical illness or being emotionally ignored in their health care plans. Health care professionals are probably assuming that priorities should go to physical needs rather than psychological or emotional

ones [80]. This may undermine emotional needs although they could be a priority for older persons. Furthermore, the notion that physical illness causes psychological deterioration and that psychological disturbances exacerbate physical illness is eventually observed in this context. Thus, older persons need a comprehensive and integrated approach through an identified role across teams to improve hospitalized older patients care services and emotional wellbeing [59]. Integrated model of care helps in assessing patients wellness from all aspects and their functionality will be maintained in a better way [75]. The significance of integrated model of care covers wider range of services for older patients: medical, nursing, and social services, and includes community services [80]. Studies showed that implementation of the integrated model of care for hospitalized older patients ensures more appropriate use of resources by multi-disciplinary team [80]. In addition to revealing benefits of implementing an integrated model of care for hospitalized older patients and discussing different models of care that can be used, studies have also discussed the limitations for each proposed model. There is no single model of care that can be applied in all situations or with any setup [23].

In countries such as Palestine there are no clear policies that enable health care professionals to enhance and improve the quality care provided to older persons. Thus, it is difficult to evaluate the impact of health care delivery system. This highlights the need for longitudinal studies that investigate effectiveness and efficacy of implementing integrated care model at inpatient and outpatient elderly care units, and further testing the effectiveness from perspectives of both older persons and health care professionals. This forms the future trend, and will not be limited to the fact that health care research in the field of elderly care needs to emphasize integrated care model to assure the quality of care provided.

CONCLUSION

Care for older patients is characterized by fragmentation, and multiple specialty sectors are interrelated, leading to higher levels of hospital needs. Good quality of care results in good quality of life for older patients, which means that their physical, psychological, and social needs are fulfilled. Care for older patients should be holistic. There has been an increasing interest in the potential of applying integrated model of care to improve older persons' care services, satisfaction, and utilization outcomes. Commonly used measurement indicators for quality of healthcare in various researches were physiological and emotional wellbeing.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTEREST

The author declares no conflict of interest, financial or otherwise.

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