

Review Article

Contribution of occupational therapy interventions in the approach of elderly people hospitalized in Acute Geriatric Units: a narrative review

Contribuição das intervenções da terapia ocupacional na abordagem do idoso internado em Unidades Geriátricas Agudas: uma revisão narrativa

Contribución de las intervenciones de terapia ocupacional en el abordaje de personas mayores hospitalizadas en Unidades Geriátricas de Agudos: una revisión narrativa

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Abstract

Introduction: The Acute Geriatric Units (AGU) are units specialized in caring for the elderly people. Specifically in Chile, there are few professionals dedicated to this area, despite establishing more acute geriatric units with an interdisciplinary team. From occupational therapy, an approach from an occupational perspective is possible. However, little evidence was found that explains the contribution of occupational therapy in AGU in the Chilean context. **Objective:** Summarize the contribution of the interventions carried out by occupational therapists to elderly people hospitalized in AGU, reviewing national and international literature. **Methodology:** Narrative bibliographic review, between October 2021 and January 2022. **Results:** The main results highlight the contribution of occupational therapy to address frailty in older people in interventions carried out by interdisciplinary teams, the promotion and respect for autonomy and independence (in Basic and Instrumental Activities of Daily Living), the functional recovery and preparation for discharge, contributing to the reduction of rehospitalization rates. **Conclusion:** The participation of occupational therapy in the AGU provides tools and strengthens the skills of older people in order to

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allow them to function effectively in their occupations, independently and autonomously in various contexts, mainly in activities of daily living. In addition, it seeks to raise awareness of the importance of increasing specialization in this area and the need to increase the number of AGU nationwide.

Keywords: Geriatrics, Hospitalization, Occupational Therapy.

Resumo

Introdução: As Unidades Geriátricas Agudas (UGAs) são unidades especializadas no atendimento ao idoso. Especificamente no Chile, há poucos profissionais dedicados a essa área, apesar de estabelecer unidades geriátricas mais agudas com equipe interdisciplinar. A partir da terapia ocupacional é possível uma abordagem a partir de uma perspectiva ocupacional, no entanto, foram encontradas poucas evidências que expliquem a contribuição da terapia ocupacional em UGAs no contexto chileno.

Objetivo: Resumir a contribuição das intervenções realizadas por terapeutas ocupacionais a idosos internados em UGAs, revisando a literatura nacional e internacional. **Metodologia:** Revisão bibliográfica narrativa, entre outubro de 2021 e janeiro de 2022. **Resultados:** Os principais resultados destacam a contribuição da terapia ocupacional no enfrentamento da fragilidade em idosos nas intervenções realizadas por equipes interdisciplinares, na promoção e respeito à autonomia e independência (particularmente nas Atividades Básicas e Instrumentais de Vida Diária), na recuperação funcional e na preparação para a alta, contribuindo para a redução das taxas de reinternação. **Conclusão:** A participação da terapia ocupacional na UGAs fornece ferramentas e fortalece as habilidades dos idosos para permitir que eles realizem de forma eficaz em suas ocupações, de forma independente e autônoma em vários contextos, principalmente nas atividades da vida diária. Além disso, procura sensibilizar para a importância de aumentar a especialização nesta área e para a necessidade de aumentar o número de UGAs a nível nacional.

Palavras-chave: Geriatria, Hospitalização, Terapia Ocupacional.

Resumen

Introducción: Las Unidades Geriátricas de Agudos (UGAs) son unidades especializadas en atención de Personas Mayores (PM). Especificamente en Chile, existen pocos profesionales dedicados a esta área, pese a establecer más UGAs con un equipo interdisciplinario. Desde terapia ocupacional es posible un abordaje desde una perspectiva ocupacional, no obstante, se encontró escasa evidencia que explicita la contribución de terapia ocupacional en UGAs en el contexto chileno.

Objetivo: Resumir la contribución de las intervenciones realizadas por terapeutas ocupacionales a personas mayores hospitalizadas en Unidades Geriátricas de Agudos, revisando literatura nacional como internacional. **Metodología:** Revisión bibliográfica narrativa, entre octubre del 2021 y enero del 2022. **Resultados:** Los principales resultados destacan la contribución de terapia ocupacional para el abordaje de la fragilidad en PM, en intervenciones llevadas a cabo por equipos interdisciplinarios, la promoción y respeto por la autonomía e independencia (particularmente en Actividades de la Vida Diaria Básicas e Instrumentales), la recuperación funcional y la preparación del alta, contribuyendo a la reducción de las tasas de re-hospitalización.

Conclusión: La participación de la terapia ocupacional en UGAs aporta herramientas y fortalece las habilidades de las PM con el fin de permitirles desenvolverse

efectivamente en sus ocupaciones, de forma independiente y autónoma en diversos contextos, principalmente en actividades de la vida diaria. Además, se busca concientizar sobre la importancia de aumentar la especialización en esta área y la necesidad de aumentar la cantidad de UGAs a nivel nacional.

Palabras claves: Geriátría, Hospitalización, Terapia Ocupacional.

Introduction

Currently the world population has managed to increase their life expectancy considerably as the years go by. It is estimated that life expectancy at birth will increase, globally, from 72.6 years in 2019 to 77.1 in 2050 (Organización de las Naciones Unidas, 2019). In other words, today there is an increase in the aging of the world population and it is expected that this will continue to increase in the future due to the different technological advances, both in the medical and scientific areas, which have a positive impact on people's quality of life (Organización Mundial de la Salud, 2021). In the case of Chile, and despite not being a developed country, studies by the Economic Commission for Latin America and the Caribbean (ECLAC) indicate that by 2050 Chile will have a 30.6% elderly population, making it the second country in Latin America with the largest elderly population (Godoy, 2020).

Although these indicators are promising and demonstrate the great growth and development that both science and medicine have presented in the Chilean territory, great difficulties arise in terms of the number of professionals available to care for EP (elderly people) in a specialized manner, because it is expected that as the EP population increases, their needs, care, and problems that afflict them will increase. This is based on data from the National Study of Dependency in the Elderly population, carried out by Servicio Nacional del Adulto Mayor (2009), where it is mentioned that the prevalence of frailty increases with age, reaching 52.9% in those over 80-84 years of age, and the National Registry of Individual Providers of the Superintendence of Health, which states that, as of December 31, 2019, there were 128 medical professionals specializing in geriatrics in Chile registered in the Superintendence of Health, which means a ratio of one geriatrician for every 15,650 people over 65 years of age and over (Villalobos & Guzmán, 2021).

On the other hand, it is necessary to recognize that the adequate response to the health needs of the elderly is not solved exclusively with more geriatricians, but rather it is needed an interdisciplinary team that complements and enhances different areas related to health that the geriatric professional does not cover ((Organización Mundial de la Salud, 2015). Llera (2008) defines geriatric care as a set of care levels, hospital and extra-hospital, health and social, aimed at providing interdisciplinary, integrated, comprehensive and specialized care to the elderly; revealing the close relationship between health and social elements, essential in the care of the elderly. Today in Chile, the Acute Geriatric Units (hereinafter UGAs) are implemented, defined as a unit specialized in the care of elderly people with frailty and/or with exacerbated acute or chronic pathology, and who as a consequence of it present loss of their functional capacity. This unit has an interdisciplinary team made up of doctors specialized in geriatrics and internal medicine, nurses, higher level nursing technicians, occupational

therapists, kinesiologists, nutritionists, among others (Ministerio de Salud de Chile, 2018). Due to its complexity, geriatrics demands the participation of a large percentage of these professionals in the care process.

As Hidalgo (2015) states, the UGAs, despite being scarce, have a great positive impact in areas such as rehabilitation, functional capacity and occupational performance of the EP. One of the main tasks of the interdisciplinary team is to guarantee the continuity of the care provided, in this context, occupational therapy have a fundamental role within the team for the recovery of these affected areas. Following this line, according to Gajardo (2008), they are in charge of assessing the psychophysical state of the person, developing approaches based on the results of this assessment, educating and advising family members and people in charge of care, trying to favor the transition to discharge through continuity of care and subsequent follow-up. According to Santamaría Peláez & González Bernal (2020), the purpose is for the person to execute their Activities of Daily Living (ADL) more smoothly, also considering the material conditions of their homes and the need for assistive technology products that can favor their performance in these activities.

Although there is abundant bibliography on the role of occupational therapy and the benefits of its implementation in hospitalized older people (Abizanda et al., 2011; Ballarín et al., 2018; Cuevas-Lara et al., 2019; Domínguez-Martín & Lozano-Berrio, 2010; Gajardo, 2008; Roberts & Robinson, 2014), it is scarce in relation to the role of discipline in Acute Geriatric Units. The foregoing encourages the search for documentation that relates the importance of the approach of elderly people hospitalized in UGAs, with emphasis on the contribution of occupational therapy in the recovery and strengthening of lost skills, due to prolonged hospitalization periods as well as the presence of geriatric syndromes.

The research question that guides this narrative review is: *What is the contribution of occupational therapy in the approach of the EP hospitalized in Acute Geriatric Units?*, this with the objective of *“Summarizing the contribution of interventions carried out by occupational therapists with elderly people hospitalized in Acute Geriatric Units”*, in order to contribute to disciplinary development in the area.

Methodology

A narrative bibliographic review was developed (Guirao Goris, 2015), using as search engines and databases: Elsevier, the TOG Coruña Magazine, the American Journal of Occupational Therapy (AJOT), Google scholar, SciELO, PubMed and the Journal of the American Medical Association (JAMA).

The following search terms were used in English and Spanish: “Unidad Geriátrica de Agudos”, “terapia ocupacional”, “Geriatría”, “personas mayores”, “Adultos mayores”, “beneficios”, “Acute geriatric units”, “Occupational therapy”, “older adults”, “and elderly people”, “Benefits”.

The search limits for the articles were:

- Year of publication: between 2007 and 2021.
- Languages: Spanish and English.
- Population: adults over 60 years of age.

The inclusion criteria were to select sources that:

- Presented in their title concepts such as “occupational therapy”, “Acute Geriatric Units”, or that allude to the medical care of people over 60 years of age.
- Abstract is related to and relevant to the research question or topic.
- Addressed in their content the medical care of EP admitted to UGAs.
- The content is related to occupational therapy and the intervention process from this area is explained.
- Include aspects of the intervention or contribution of occupational therapy in UGAs.
- Possess data to support the effects of medical care on EP.
- Provide comparisons of the EP’s initial hospitalization medical status and his medical status at discharge.

The exclusion criteria were:

- Texts that were related to the EP hospitalized in units other than UGAs or that are in a facility outside a Hospital.
- Texts that were focused on other professions of the interdisciplinary team in UGAs.
- Texts that investigated the importance of occupational therapy in other units of the hospital.

The text selection process consisted of reducing the articles based on the keywords that appeared in the search results. These were selected for further review only if the document showed $\frac{2}{3}$ of the concepts of interest.

Then, the articles were filtered according to the source and year of publication. In the last criterion, the range of years of acceptance was more flexible because they contained relevant information for the development of the research. The oldest article that was analyzed was from 2007.

The following selection strategy was based on reading the abstract, if it was relevant to the research topic, the article was reviewed in detail.

The search was carried out between October 2021 and January 2022, yielding 42,796 results. There were 34 articles that met the inclusion and exclusion criteria (10 in English and 24 in Spanish). Finally, when reviewing these 34 articles in detail, 24 are extracted that are directly linked to the objective of this review (7 in English, 15 in Spanish, and 2 in Portuguese, the latter yielded by the search in Spanish, it was decided to incorporate them for their relevance and contributions to this review).

Results

The reviewed articles are shown in Table 1, they are ordered by year of publication and language.

Table 1. Articles reviewed in the narrative review of the literature “Contribution of occupational therapy interventions in the approach of elderly people hospitalized in Acute Geriatric Units”.

Authors	Name of the article	Year of publication	Language
1. (Pérez Hernández et al., 2007)	Resultados de salud en Geriátría. Una aproximación con base en las intervenciones de un hospital de día	2007	Spanish

Table 1. Continued...

Authors	Name of the article	Year of publication	Language
2. (Gajardo, 2008)	El proceso de terapia ocupacional en la unidad geriátrica de Acute del HCUCh	2008	Spanish
3. (Villalobos Courtin, 2008)	Gestor de caso del adulto mayor en riesgo de dependencia	2008	Spanish
4. (Romero Rizos et al., 2009)	El anciano en la unidad de geriatría de Acute	2009	Spanish
5. (Domínguez-Martín & Lozano-Berrio, 2010)	Terapia ocupacional a contra reloj: unidades geriátricas de Acute	2010	Spanish
6. (Palacios Ceña & Salvadores Fuentes, 2010)	Asistencia geriátrica y equipo interdisciplinar	2010	Spanish
7. (Abizanda et al., 2011)	Effects of a short-term occupational therapy intervention in an acute geriatric unit. A randomized clinical trial	2011	English
8. (Gerpe Gil, 2012)	Valoración e intervención de terapia ocupacional en caídas	2012	Spanish
9. (Flood et al., 2013)	Effects of an acute care for elders unit on costs and 30-day readmissions.	2013	English
10. (Cares et al., 2013)	Evolución de la capacidad funcional en adultos mayores hospitalizados en la unidad geriátrica de Acute del Hospital Clínico de la Universidad de Chile	2013	Spanish
11. (Ortega Matas et al., 2014)	Intervención proactiva desde una unidad de geriatría en la atención del paciente crónico complejo ingresado en un hospital de Acute	2014	Spanish
12. (Roberts & Robinson, 2014)	Occupational Therapy's Role in Preventing Acute Readmissions	2014	English
13. (Hidalgo, 2015)	¿Por qué son necesarias unidades geriátricas de Acute en el sistema de salud chileno?	2015	Spanish
14. (García-Cruz & García-Peña, 2016)	Impacto de la fragilidad sobre el estado funcional en ancianos hospitalizados	2016	Spanish
15. (Ocampo & Reyes Ortiz, 2016)	Revisión sistemática de literatura. Declinación funcional en ancianos hospitalizados	2016	Spanish
16. (Martínez-Velilla et al., 2016)	Physical activity and early rehabilitation in hospitalized elderly medical patients systematic review of randomized clinical trials	2016	English
17. (Lozano-Rengifo & Chavarro-Carvajal, 2017)	Deterioro funcional hospitalario. Revisión y actualización con una perspectiva orientada a mejorar la calidad de atención del anciano	2017	Spanish
18. (Ballarin et al., 2018)	Intervenções da terapia ocupacional com paciente hospitalizada: relato de experiência	2018	Portuguese

Table 1. Continued...

Authors	Name of the article	Year of publication	Language
19. (Campo Torregroza et al., 2018)	Funcionamiento cognitivo, autonomía e independencia del adulto mayor institucionalizado	2018	Spanish
20. (Freitas et al., 2018)	Hospitalização e mortalidade em idosos institucionalizados	2018	Portuguese
21. (Westgård et al., 2018)	Comprehensive geriatric assessment pilot of a randomized control study in a Swedish acute hospital: a feasibility study	2018	English
22. (Cuevas-Lara et al., 2019)	Effectiveness of occupational therapy interventions in acute geriatric wards: A systematic review	2019	English
23. (Laurent et al., 2020)	Functional decline in geriatric rehabilitation ward; is it ascribable to hospital acquired infection? A prospective cohort study	2020	English
24. (Santamaría Peláez & González Bernal, 2020)	Terapia ocupacional en fragilidad: una aproximación bibliográfica	2020	Spanish

Source: Own design.

For a better perspective of the contribution of occupational therapy in the occupational performance of EP in UGAs, the results will be divided into six sections that cover different topics where the role and contribution of the participation of occupational therapy in the approach of EP hospitalized in these geriatric units can be evidenced.

Frailty in EP

Frailty is a clinical-biological syndrome related to the decrease and weakness of psychological and physical capacities of EP, such as generalized fatigue, depression, decreased resistance, geriatric syndrome, among others (García-Cruz & García-Peña, 2016). This syndrome generates adverse effects such as falls, hospitalization and death, so its condition requires specialized geriatric supervision to prevent functional deterioration of the affected EP (García-Cruz & García-Peña, 2016). In cases that involve hospitalization, the UGAs have shown benefits in the performance and reduction in the admission of EP because they have an interdisciplinary team trained in the rehabilitation and care of EP over 65 years of age (Ocampo & Reyes Ortiz, 2016).

Occupational therapy as part of the professional team that makes up the UGAs “focuses on getting the elderly to reach a state of optimal occupational performance that guarantees their autonomy with the least possible risk of accidents” (Gerpe Gil, 2012, p. 10) basing their intervention in “developing physical, cognitive and material strategies that allow the elderly to reverse their fragility and maintain an expected rate of execution of their daily activities” (Santamaría Peláez & González Bernal, 2020, p. 7).

Due to the demands of the hospital environments and “the condition of frailty that makes EP even more susceptible to complications, which do not translate into an improvement of the health condition, but rather increase the mortality rate of this

group” (Freitas et al., 2018, p. 3), it is difficult to specifically distinguish the work of occupational therapy in UGAs. That, because the susceptible condition of the frail EP requires comprehensive care where the different perspectives and professional actions complement each other.

Despite the aforementioned, the articles by Gerpe Gil (2012) and Gajardo (2008) make evident that occupational therapy contributes to the prevention of functional deterioration and possible deaths of EP before and/or after hospitalization because it focuses on preventing physiological and mental relapses, in addition to reducing the risk of falls by educating both EP and their families about the different risks to which they may be exposed when dealing with daily environments and intervening at home and/or making changes within it.

Following this line, the intervention of occupational therapy in its different stages of work (evaluation, intervention and follow-up), favors the emergence of improvements in the occupational performance of the fragile EP by reducing hindering or limiting factors that can affect or mean a risk to their integrity and quality of life.

Contribution of interdisciplinary interventions in the health of EP

The intervention for the promotion of the health of the elderly is carried out through interdisciplinary approaches from various disciplines such as geriatrics, nursing, occupational therapy, kinesiology, speech therapy, pharmacology, social work, among others. The joint work of the teams has meant a tangible benefit in the hospitalization processes of EP, optimizing actions and health services based on well-being through a comprehensive geriatric evaluation, aimed at modifying the environment, care, and review of pharmacological management, exercise programs and design of the geriatric discharge plan (Ocampo & Reyes Ortiz, 2016). In addition, according to a review carried out by Lozano-Rengifo & Chavarro-Carvajal (2017, p. 6), it was concluded that “Acute geriatric units have shown a 12% reduction in functional deterioration with a decrease in mortality and health costs, compared to patients hospitalized for internal medicine”.

On the other hand, Laurent et al. (2020) mention the need to approach the intervention from a holistic and inter-professional approach centered on the person, to include all its dimensions from assessment to discharge, instead of a purely disciplinary approach. In addition, systematic review of medical records and their documentation confirmed that patients received statistically safer healthcare services if they were assessed and treated by an interdisciplinary team including occupational therapy (Westgård et al., 2018). According to a systematic review of 17 studies carried out by Martínez-Velilla et al. (2016) it was possible to determine that an early intervention by this interdisciplinary team, accompanied by physical exercise in EP hospitalized in geriatric units, resulted in a significant increase in functional capacity in ADL. Especially in the group that received the intervention it was achieved a reduction of the frailty, hospitalization, risk of readmission of EP, in addition to benefiting their social reintegration and demonstrating that in economic matters the interventions are cost-effective.

The joint intervention of occupational therapy with other disciplines allows the early detection of functional deterioration and ADL involvement to a greater or lesser degree, together with the implementation of measures aimed at resolving the causes of this deterioration. In addition, it enhances residual capacities, recover losses and, above all, facilitate the greatest possible independence and autonomy for the EP (Palacios Ceña &

Salvadores Fuentes, 2010). In other words, an early, continuous and high quality interdisciplinary rehabilitation (with teams that have occupational therapy) could improve and increase functionality, health, promote recovery, thereby restoring independence and confidence in EP.

Functionality: an increase in physical and cognitive functionality

Functionality is “the ability to fulfill or carry out certain actions, activities or tasks required in daily life” (Villalobos Courtin, 2008, p. 20). To measure the functionality of the EP during the hospitalization process, standardized evaluations are implemented. In this review, the use of the Barthel Index predominates. These evaluations are carried out upon admission, during hospitalization and at the time of discharge, in order to have a comparison of the results and to identify an evolution or setback in this area.

Within the selected texts that talk about the functionality of the EP hospitalized in UGAs, it is mainly evidenced how it is negatively affected during the hospitalization process, and how interdisciplinary and occupational therapy interventions can positively impact this area by increasing functional capacity.

On the one hand, four of the texts mention functional loss caused by hospitalization and illness; in the text by Cares et al. (2013) they mention that 78.5% of hospitalized patients see their functional capacity diminished during hospitalization due to a disease; the text by García-Cruz & García-Peña (2016) evidences a relationship between frailty and functional deterioration where 21% of frail patients and 8% of non-frail patients present a functional decline at hospital discharge compared to their admission; in the text by Laurent et al. (2020) it is mentioned that 17.5% of patients experienced functional loss during hospitalization; and related to the previous evidence, in the text by Ocampo & Reyes Ortiz (2016) it is mentioned that functional decline is an event that frequently occurs during hospitalization.

On the other hand, eight of the reviewed texts show evidence of the contribution that occupational therapy interventions and/or an interdisciplinary team have in increasing functionality; the texts of Hidalgo (2015), Cares et al. (2013) and Pérez Hernández et al. (2007) show an increase in the Barthel index, in the first two texts this increase is 72% in the admission-discharge comparison, while in the last one there is evidence of an increase of approximately 5 points at discharge; while the systematic review by Cuevas-Lara et al. (2019) 4 of the 6 studies reviewed obtained an increase in functionality through the implementation of occupational therapy interventions, compared to a control group that did not receive this intervention, results that are also evidenced in the texts by Abizanda et al. (2011) and Martínez-Velilla et al. (2016). In addition to what was said above, the text by Domínguez-Martín & Lozano-Berrio (2010) mentions that the inclusion of occupational therapists in acute hospitalization units favors the recovery of functionality, while the text by Lozano-Rengifo & Chavarro- Carvajal (2017) mentions the intervention of a multidisciplinary team in UGAs, but in accordance with the previous results, a 12% decrease in functional deterioration is evident.

Independence: Increase in Basic and Instrumental Activities of Daily Living (BIADL)

One of the objectives of occupational therapy is to achieve the maximum possible independence in the people who provide services, both in BADL - and social participation, as well as free time, among others, or to allow the EP and its surroundings to have better quality of life (Lozano-Rengifo & Chavarro-Carvajal, 2017). This objective becomes critical when people are hospitalized and correspond to the age range of EP, since occupational therapy is centered on preventing hospital readmissions while intervening, allowing an independent development with the environment (Roberts & Robinson, 2014). For this, it is recommended to carry out the relevant evaluations related to the BADL (Barthel or Katz index) and IADL (Lawton and Brody index) during the first 48 hours (Romero Rizos et al., 2009).

Out of the texts selected for the development of this section linked to the independence of the EP, four lead to the result that the interventions carried out by occupational therapists contribute to the independent realization of the BIADL; In the study by Carrasco et al., from 2011 (cited in Hidalgo, 2015) an increase in scores from 2 to 3 IADL measured with the Lawton and Brody scale is mentioned; in the article by Cuevas-Lara et al. (2019) it is mentioned that in 5 of the studies analyzed, EP that receive occupational therapy attention obtained better scores in ADL independence compared to the control group; Gajardo (2008) measured the level of independence of EP in BADL at the time of hospital discharge compared to the time of admission to the UGAs, finding that of the 26 participants in the study, 18 increased their independence, 2 reduced their independence and 6 maintained their level of independence; while Ballarin et al. (2018) observed, based on the experience of occupational therapy intervention to a hospitalized woman, the increase in her independence in daily activities within the hospital. In the texts of Hidalgo (2015); Cuevas-Lara et al. (2019) and Gajardo (2008) there is evidence of an increase in the independence of EP who have received attention that includes the OT approach, based on the measurement with standardized instruments such as the Lawton and Brody scale, Barthel index, FIM, among others. This is in the comparison of an initial value, of admission, and a final value, of discharge, in the case of Gajardo (2008), or the comparison of a group that receives intervention with a control group in the case of Cuevas-Lara et al. (2019). While the text by Ballarin et al. (2018) is based on a specific case of a hospitalized woman who received occupational therapy care, during the intervention process and due to her positive response to them, she managed to increase her independence in daily activities that she carried out in the hospital.

The text by Ortega Matas et al. (2014) measures the dependence/independence for BADL according to the Barthel index, finding that prior to admission to the hospital, the EP present a mild or independent level of dependence, and the following 24 hours manifest a moderate or severe level of dependence, which shows an increase in the dependency levels of all research participants in this short period of time. In relation to this, the text by Freitas et al. (2018) associates periods of hospitalization with an increase in dependence of the EP.

Another a factor that influences the independence of ADL in EP is the functional decrease during the hospitalization period, since in the text by Laurent et al. (2020) it

was concluded that those who present a functional impairment experience a decrease in the scores obtained on their ADL performance.

Autonomy

For the development of this section, the term autonomy is considered from the idea of Martínez (2013) and López Fraguas et al. (2004), who define it by referring to the capacity or ability of a person to make choices, make decisions and assume the consequences or take responsibility for themselves.

In the revised articles, it is highlighted that the work of occupational therapy in EP hospitalized in UGAs is to prevent and lessen the loss of capacities and functions, mainly in the cognitive area, where in a study carried out with the EP there was a statistically significant reduction both in the delirium density (relationship between the duration and exposure of the event) which decreased from a 6.6% in the control group to 0.15% in the intervention group, as well as in the incidence which went from 20% in the control group at 3% in the intervention group once the process was concluded, in addition to mentioning that the incidence had a significant decrease in comparison with patients hospitalized in other units for cardiopulmonary or other illnesses not related to cerebrovascular accidents (Cuevas-Lara et al., 2019).

It should be noted that, even when the professional team carries out its work in order to achieve a recovery of autonomy in EP hospitalized in UGAs, post-hospital discharge care is very important, because the closest support network will be the responsible for providing continuity of care and ensuring full recovery from home or Long-Term Institutions for the Elderly (ELEAM in Spanish) defined upon discharge.

This aspect is not minor, since as Hidalgo (2015, p. 4) mentions, studies show that “close to 55% of older patients at discharge are referred to long-stay institutions and only 12% return home”, thus becoming a frequent discharge destination for those who have received occupational therapy care at UGA. Institutions that according to (Campo Torregroza et al., 2018) lead more frequently to dependency and disability affecting their autonomy, due to factors such as immobility, where according to Ocampo & Reyes Ortiz (2016) they remain between 73% and 83% of the time in bed, losing muscle mass and early compromising gait and mobility.

Recovery at discharge: re-hospitalization rate.

One of the greatest benefits of the interdisciplinary team intervention and occupational therapy in hospitalized patients is the preparation for discharge and lower re-hospitalization rates (Flood et al., 2013). As Roberts & Robinson (2014) mention in their article, 19.4% of patients in the US who are discharged are readmitted within 30 days and 51.6% within 1 year. When the main and most frequent causes of readmission were detected, it was found that the most frequent cause was falls, accounting for 1.9%-3% of all hospitalizations, followed by pressure injuries, which range from 0.4% to 38% in intensive care hospitals and 2% to 24% in long-term nursing facilities. Then, deep vein thrombosis, pulmonary embolism and venous thromboembolism are found, which per year are estimated at 300,000 to 600,000 cases in people over 80 and 10%-30% die

with 1 month of diagnosis. And finally there is diabetes and glycemic control that affects more than 20 million people and means 20% of hospitalized patients.

On the other hand, in the research by Pérez Hernández et al. (2007) they address EP discharge through a retrospective observation of all patients admitted to a given hospital and mention that once treatment was completed, 70% of patients returned to their habitual residence, 12.5% were referred for continue care in a day center for the elderly, 6% required referral to a general hospitalization service and 5.5% to UGA. Thus showing the efficiency and importance of the intervention.

Regarding the role of the interdisciplinary team, all the authors agree that their interventions contribute to increasing independence and strengthening BIADL in order to carry out optimal preparation for discharge. In the article by Cares et al. (2013) it is highlighted, as well as in the international literature on which their research was based, that the comprehensive geriatric evaluation applied in specialized units through interdisciplinary work has a positive impact on the evolution of the functional capacity of EP during their hospitalization allowing greater independence at medical discharge, which is associated with a better quality of life. This agrees with what was expressed by Hidalgo (2015) who mentions that the functionality at the time of discharge is higher in a UGA when compared to other services, considering the basal functionality of the person before being hospitalized. This emphasizes the importance of the interdisciplinary team interventions and how their efficiency is increased in a specialized unit, generating more optimal discharge conditions, leading to reducing re-hospitalizations.

Finally, speaking exclusively of the role that occupational therapy plays in the prevention of re-hospitalization, Roberts & Robinson (2014) mention that the functional level considerably affects re-hospitalization, for which reason occupational therapy works in order to minimize the rate of readmission to hospital while acting to optimize the patient's abilities to function safely and independently in their environment, by identifying opportunities for intervention in all areas of occupational performance, including medication management, falls, risk prevention, self-care, self-management, strategies, home safety and mobility safety. This shows that occupational therapy work significantly reduces 30-day readmissions, thereby lowering patient readmission costs and retained hospital reimbursement risk (Roberts & Robinson, 2014).

Analysis

This review has focused on summarizing the contribution of the interventions carried out by occupational therapists to elderly people hospitalized in UGAs, specifically on how this profession faces issues that afflict the hospitalized elderly population, considering a mostly interdisciplinary approach (due to the characteristics of this type of units), and how the work of occupational therapy can affect the functionality and occupational participation of EP in UGAs, considering their performance and quality of life both during their stay in the hospital and in the preparation and discharge from the facility.

To account for the findings of this review, six areas where the participation or integration of occupational therapy contributed to the approach of EP hospitalized in UGAs were developed: *Frailty, Interdisciplinary team approach, Functionality, Independence in BIADL, Autonomy and Recovery at discharge*. It is considered important to highlight that

all these areas are interrelated, converging in their influence on the functional capacity of the elderly person, since states of frailty condition or limit it, just like the hospital setting. In turn, functional capacity can be recovered or maintained in UGA through interdisciplinary interventions, with a key role for occupational therapy, which considers the relationship between autonomy and independence to maintain the person's functionality (Figure 1). This is highly significant, since as Marín (2007) stated, functional capacity is the best indicator of a person's well-being, the greatest indicator of human and economic resources, with a predictive value of disability and premature death, that is, a timely and specialized approach of the hospitalized EP, which includes occupational therapy, safeguards their functional capacity, a key element considering this capacity as a prognostic factor for morbidity and mortality in this group, which undoubtedly impacts on their quality of life and in the burden on the social health system.

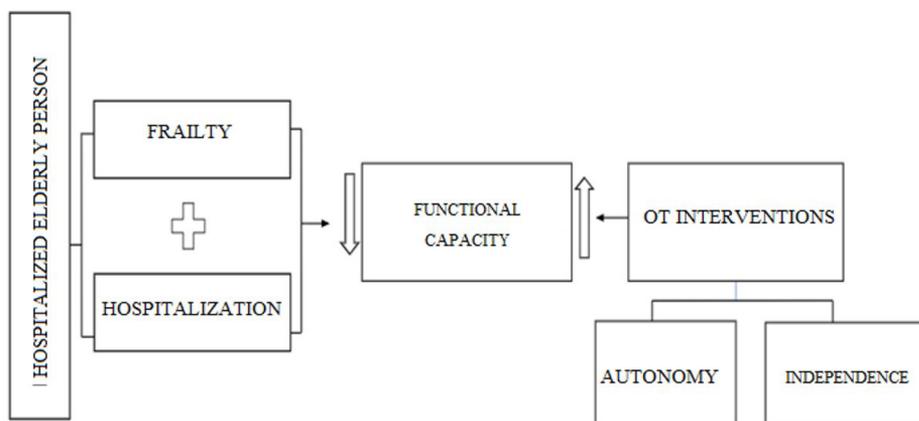


Figure 1. Integration of review results. Caption: The state of frailty of a hospitalized elderly person conditions and decreases their functional capacity. Occupational therapy interventions focused on autonomy and independence help to recover or maintain this functional capacity. Source: Own design.

Finally, it is important to highlight that occupational therapy interventions focus on finding ways to improve the occupational performance of the EP being treated, by training execution skills that allow them to develop their BADL in a fluid manner that may or may not include modifications in their environment and technical aids (Santamaría Peláez & González Bernal, 2020). Therefore, occupational therapy in UGAs provides EP with tools and skills so that they can independently and autonomously carry out daily occupations in different areas such as social, recreational, personal care, food, among others. Since the occupational therapy intervention not only resides in the hospital context, but can be extended to the post-discharge period by monitoring the EP, it is possible to optimize these resources to prevent hospital readmission, either through home evaluation of the EP to prevent accidents and/or falls, recommending adaptations to the environment or to the task, which may represent an obstacle to the development of EP occupations, thereby seeking to promote their occupational participation.

Conclusions

Based on the findings of this review, in the first instance we can conclude that the work carried out by occupational therapy, which involves *evaluation, intervention and follow-up* of the people they care for, contributes to the approach with the hospitalized EP, because they reduce or try to counteract the functional impairment that they may have upon medical admission or that may develop during their hospital stay, in addition to focusing on compensating or developing skills and abilities in order to restore or maintain their occupational performance.

This contribution is even greater when the hospital unit is prepared to receive and address the elderly, including health teams specialized in addressing this population, such as the Acute Geriatric Units.

It should be noted that, in the Chilean reality, an opening of Acute Geriatric Units has progressively been generated, where competent multi-professional teams are required to face the problems of this population group, considering their particular characteristics and potential situations of vulnerability, where occupational therapy has a significant and determining role in promoting functionality, autonomy, independence, discharge planning, monitoring, which undoubtedly have an impact on the quality of life of the beneficiaries of these actions.

Notwithstanding the foregoing, in accordance with the socio-demographic changes that are being experienced in Chile and the world, the number of Acute Geriatric Units that exist today at the national level cannot respond effectively to the health demands of this population that is in increase. For this reason, the need for units specialized in the approach of the elderly, such as the Acute Geriatric Units, becomes imperative, a need that includes the increase in Occupational Therapists trained to promote the approaches that are carried out in them, achieving, on the one hand, favoring recovery, functional independence, autonomy, quality of life of the beneficiaries of these interventions: and on the other, reducing the social and health cost of prolonged hospitalizations or re-hospitalizations, institutionalization, need for care, dependency and disability.

Consequently, it is considered necessary to make the future professional population of the Chilean health area aware of the direct relationship between training in approaching the elderly and the quality of care provided, since the absence of specialization in the area limits the quality of the approaches, which in the long-term brings burdens to the socio-health system.

Finally, it is considered key that with the incorporation of Occupational Therapists at this level of care, scientific development in the area is empowered, to promote accessibility to Chilean scientific research that exclusively relates occupational therapy to geriatric units, since they can provide guidance and make explicit its role in a key area of this population group, in order to promote and validate the disciplinary role in the approach of the EP hospitalized in UGAs.

Limitations and Projections

Despite finding scientific evidence that supports the contribution of the interventions implemented in UGAs to EP, a low amount focuses specifically on the role that occupational therapy plays in these units, with the evidence predominantly in English.

This determines that, on the one hand, the evidence focused on the interdisciplinary team prevails (most likely due to the characteristics of the teams and approaches in UGAs) and occupational therapy in other hospital units, different from the UGAs.

This difficulty in finding material related to the question was accentuated when the studies were located in Chile, a fact that we relate to the little development, both in geriatric specialization, and in the gradual opening of UGAs at the national level, which was evidenced in the introduction of this research.

This is why it is considered necessary, in our national and Latin American reality, to promote training, specialization, research, and dissemination of the actions, contributions, and role of occupational therapy in the approach of the EP hospitalized in UGAs, since, as has been reviewed, they allow generate approaches centered on the elderly, recognizing their capabilities, vulnerabilities, and the importance of promoting autonomy and functional capacity, to improve the quality of care and contribute to increasing the social and health benefits of interventions.

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