Volume 10, No.6, October - November 2022

International Journal of Bio-Medical Informatics and e-Health Available Online at http://www.warse.org/IJBMIeH/static/pdf/file/ijbmieh061062022.pdf https://doi.org/10.30534/ijbmieh/2022/61062022



The Negative Consequences of Poor Treatment of the Elderly Patients in Hospitals

¹Dalal Rahil Alshammari, ²Maha Fuhied Alharthi, ³ Aisha Essa Alharbi, ⁴ Farhan Muhareb Oqail Alanazi, ⁵Mosaed Shujaa Alharby

¹Alshammarida@ngha.med.sa, ²Alshadadialharthima@ngha.med.sa, ³Harbia4@ngha.med.sa, ⁴Alanazif13@ngah.med.sa, ⁵Alharbymo@ngha.med.sa

Received Date: September 10, 2022 Accepted Date: October 1, 2022 Published Date: November 07, 2022

ABSTRACT

The treatment of the elderly in hospitals is a critical aspect of healthcare, yet instances of poor treatment and neglect of this vulnerable population have significant negative consequences. This article explores the consequences of bad dealing with the elderly in hospitals, shedding light on the physical, emotional, and psychological effects. Physically, poor treatment increases the risk of infections, pressure ulcers, and medication errors among elderly patients. Emotionally and psychologically, it leads to feelings of helplessness, anxiety, depression, and social isolation. Moreover, poor treatment erodes trust in the healthcare system and violates patient rights, with ethical and legal implications. Recognizing and addressing these consequences is crucial to advocate for compassionate and respectful care for the elderly in hospitals.

Keywords: Elderly, hospitals, healthcare, consequences, poor treatment

1. INTRODUCTION

The treatment of the elderly in hospitals is a critical aspect of healthcare that requires careful attention and compassionate care. Unfortunately, instances of poor treatment and neglect of elderly patients in hospitals have significant negative consequences on their well-being and overall quality of life. It is essential to shed light on these consequences to raise awareness and advocate for improved care for this vulnerable population.

As our society experiences an increase in the aging population, hospitals play a vital role in providing medical services to elderly individuals. However, when the elderly is subjected to substandard treatment, it can have severe physical, emotional, and psychological consequences.

Physically, poor treatment can lead to anincreased risk of infections among elderly patients. Neglecting basic infection control measures, such as hand hygiene and proper sterilization of equipment, can result in hospital-acquired infections. These infections pose a significant risk to elderly patients with weakened immune systems, leading to prolonged hospital stays, complications, and even fatalities [1]. Furthermore, inadequate attention to the prevention of pressure ulcers can result in their development among elderly patients. The lack of mobility and insufficient pressure relief techniques can lead to painful and debilitating pressure ulcers. Not only do these ulcers cause immense physical discomfort, but they also contribute to prolonged hospital stays, delay in recovery, and increased healthcare costs.

Medication errors are another consequence of the poor treatment of the elderly in hospitals. Older adults are often prescribed multiple medications to manage their various health conditions. However, the complexity of medication regimens increases the risk of errors, such as incorrect dosages, drug interactions, or omissions. These errors can have detrimental effects on the health and well-being of elderly patients, potentially leading to adverse drug reactions, hospital readmissions, and compromised treatment outcomes [4]. Emotionally and psychologically, poor treatment and neglect have profound effects on elderly patients. Negative experiences, such as disrespectful treatment, lack of communication, and perceived indifference, can contribute to feelings of helplessness and anxiety. Elderly patients may already be experiencing vulnerability due to their health conditions, and mistreatment exacerbates their emotional distress, leading to a decline in their overall well-being.

Depression and social isolation are also consequences of poor treatment of the elderly in hospitals. Older adults who are subjected to neglect and disrespect may develop feelings of worthlessness and isolation. They may feel ignored or devalued by healthcare professionals, leading to a deterioration in their mental health. These psychological consequences can further compromise their physical recovery and overall quality of life [10].

Moreover, the negative experiences of elderly patients in hospitals can result in a deterioration of trust in the healthcare system. When elderly patients encounter poor treatment, their satisfaction with the care they receive diminishes. This erosion of trust can lead to reluctance in seeking timely medical care, follow treatment plans, or share important health information with healthcare professionals. Ultimately, it can have detrimental effects on their health outcomes and exacerbate existing health conditions.

As our society ages, the care and treatment of the elderly become increasingly important. Hospitals play a critical role in providing medical services to older adults. However, when the elderly are subjected to poor treatment and neglect in healthcare settings, it can have severe consequences on their well-being and overall quality of life. This article aims to explore the negative consequences of bad dealing with the elderly in hospitals, highlighting the importance of providing compassionate and respectful care.

2. LITERATURE REVIEW

A literature review on the negative consequences of poor treatment of the elderly in hospitals reveals a range of significant findings and insights. The following review provides a summary of key studies and research conducted in this area:

A study by [7] found that poor treatment and neglect of the elderly in hospitals contribute to an increased risk of falls, pressure ulcers, malnutrition, and medication errors.

A study by [3] highlighted that inadequate pain management and delays in medical interventions can lead to prolonged hospital stays and physical deterioration among elderly patients.

Research by [6] demonstrated that poor treatment of the elderly in hospitals can result in feelings of fear, helplessness, and emotional distress, leading to heightened levels of anxiety and depression.

The study conducted by [2] revealed that experiences of neglect and disrespect can lead to a loss of dignity, decreased self-worth, and a sense of isolation among elderly patients.

A review by [9] emphasized that poor treatment and negative experiences in hospitals erode trust in healthcare providers, making elderly patients less likely to seek timely medical care and follow treatment recommendations.

In a study by [13], it was found that when trust is compromised, elderly patients may become reluctant

to disclose important health information, hindering accurate diagnosis and appropriate treatment.

Research by [5] highlighted the ethical implications of poor treatment, emphasizing the violation of patients' rights to dignity, autonomy, and quality care.

In terms of legal consequences, a study by [12] indicated that healthcare providers and institutions may face legal action, complaints, and reputational damage as a result of neglect or mistreatment of elderly patients.

These findings underscore the importance of addressing the negative consequences of poor treatment of the elderly in hospitals. It is imperative to prioritize patient-centered care, promote dignity and respect, enhance healthcare provider training, and establish protocols and policies that ensure the wellbeing and safety of elderly patients. By addressing these issues, healthcare systems can strive to provide high-quality, compassionate care for the elderly population and mitigate the negative consequences associated with poor treatment in hospitals.

3. PHYSICAL CONSEQUENCES:

When the elderly receives poor treatment in hospitals, it can have severe physical consequences that negatively impact their health and well-being. These physical consequences arise from various factors, including neglect, inadequate care, and medical errors. Understanding these consequences is essential for healthcare providers to improve the quality of care for elderly patients. The following are some of the significant physical consequences of poor treatment: [7]

- Increased risk of infections: Neglecting basic infection control measures in hospitals can expose elderly patients to a higher risk of acquiring infections. With weakened immune systems, older adults are more susceptible to infections. Failure to follow proper hand hygiene, sterilization of equipment, and adherence to isolation protocols can lead to hospital-acquired infections, such as urinary tract infections, pneumonia, or surgical site infections. These infections can be severe, prolong hospital stays, and lead to complications or even fatalities.
- **Pressure ulcers:** Elderly patients are particularly vulnerable to developing pressure ulcers, also known as bedsores or pressure sores. Prolonged periods of immobility, inadequate repositioning, and insufficient pressure relief contribute to the formation of these ulcers. Pressure ulcers are not only physically painful but also increase the risk of infections and other complications. They can be challenging to heal and may require extensive medical interventions, leading to prolonged hospital stays and increased healthcare costs.

- Medication errors: older adults often have multiple chronic conditions that require complex medication regimens. Poor treatment in hospitals may result in medication errors, such as incorrect dosages, administration, or drug interactions. The aging process can affect medication metabolism and increase the sensitivity to drugs, making elderly patients more vulnerable to adverse drug reactions. Medication errors can have detrimental effects on their health, exacerbating their existing medical conditions and potentially leading to hospital readmissions or other complications [10].
- Malnutrition and dehydration: Inadequate attention to nutritional needs and hydration can occur in hospitals where the elderly may not receive appropriate dietary support. Poor appetite, difficulties with feeding, and inadequate monitoring of fluid intake can lead to malnutrition and dehydration among elderly patients. Malnutrition weakens the immune system, delays wound healing, and increases the risk of infections. Dehydration can cause electrolyte imbalances, urinary tract infections, and confusion or delirium.
- Lack of pain management: Proper pain management is crucial for elderly patients, as they often experience chronic pain or undergo painful medical procedures. However, poor treatment may result in inadequate pain assessment, under prescribing or overprescribing of pain medications, or delays in administering pain relief. This can lead to unnecessary suffering, compromised recovery, and a decreased quality of life for the elderly.

Addressing these physical consequences requires healthcare providers to prioritize comprehensive care that focuses on infection prevention, pressure ulcer prevention, medication safety, proper nutrition, and effective pain management for elderly patients. By improving the physical care provided to the elderly in hospitals, their overall health outcomes and wellbeing can be significantly enhanced.

3. EMOTIONAL AND PSYCOLOGY CONSEQUENCES:

Poor treatment of the elderly in hospitals can have profound emotional and psychological consequences that impact their overall well-being and quality of life. Elderly patients are particularly vulnerable to the effects of negative experiences, neglect, and disrespectful treatment. Understanding these consequences is crucial to promoting compassionate and patient-centered care for the elderly. The following are some of the significant emotional and psychological consequences of poor treatment [6]:

- Increased feelings of helplessness and anxiety: Elderly patients who experience poor treatment may develop a sense of helplessness and loss of control

- over their healthcare. This can lead to heightened anxiety, as they may feel powerless and uncertain about their treatment outcomes. The lack of clear communication, disregard for their concerns, and perceived indifference from healthcare professionals can exacerbate these feelings.
- Depression and social isolation: Poor treatment and neglect can contribute to the development of depression and feelings of social isolation among elderly patients. When they are not treated with respect and dignity, older adults may feel devalued, ignored, or marginalized. This can result in a decline in their mental health, with symptoms such as persistent sadness, loss of interest in activities, and withdrawal from social interactions.
- Deterioration of cognitive function: Stressful experiences and lack of mental stimulation in hospitals can negatively impact the cognitive function of elderly patients. This is especially true for those with existing cognitive impairments, such as dementia. The unfamiliar and sometimes chaotic hospital environment, combined with inadequate attention to their cognitive needs, can accelerate cognitive decline and contribute to confusion, disorientation, and memory problems.
- Loss of trust in healthcare providers and the system: Poor treatment erodes trust in healthcare providers and the overall healthcare system. When elderly patients experience disrespectful treatment or neglect, their confidence in healthcare professionals diminishes. This loss of trust can result in a reluctance to seek medical care, follow treatment plans, or share important health information. Ultimately, it can lead to delayed or inadequate care and negatively impact their health outcomes.
- Impact on family members: Poor treatment of elderly patients in hospitals also affects their family members. Witnessing their loved ones being mistreated or neglected can cause significant emotional distress, feelings of helplessness, and anger. Family members may experience guilt for not being able to protect their elderly relatives and may struggle with decision-making regarding their care.

Addressing these emotional and psychological consequences requires healthcare providers to prioritize patient-centered care and create a supportive and empathetic environment for the elderly in hospitals. This includes fostering open communication, involving family members in the care process, providing emotional support, and ensuring that the unique emotional and psychological needs of elderly patients are acknowledged and addressed. By promoting compassionate care, healthcare providers can enhance the emotional well-being and overall quality of life for the elderly in hospitals.

4.DETERIORATION OF TRUST IN THE HEALTHCARE SYSTEM:

One of the significant negative consequences of poor treatment of the elderly in hospitals is the erosion of trust in the healthcare system. Trust is a fundamental component of the patient-provider relationship and plays a crucial role in ensuring effective healthcare delivery. When elderly patients receive substandard or disrespectful treatment, their trust in healthcare providers and the overall healthcare system can be severely compromised. [9] Here are some key points regarding the deterioration of trust:

Reluctance to seek timely medical care: Elderly patients who have experienced poor treatment may become hesitant to seek timely medical care when needed. The fear of encountering similar mistreatment or neglect can deter them from seeking necessary medical attention, leading to delayed diagnosis and treatment. This delay can have adverse consequences on their health outcomes and result in the progression of illnesses or complications.

Non-adherence to treatment plans: Deterioration of trust can also lead to non-adherence to prescribed treatment plans among elderly patients. When they feel disrespected or devalued by healthcare providers, they may question the efficacy and reliability of the recommended treatments. This skepticism can result in non-compliance with medication regimens, failure to attend follow-up appointments, or reluctance to undergo necessary medical procedures. Non-adherence to treatment plans can impede the effectiveness of interventions and compromise the elderly patients' health and well-being.

Withholding important health information: Lack of trust may lead elderly patients to withhold vital health information from healthcare providers. They may be hesitant to share details about their symptoms, medical history, or lifestyle factors that are crucial for accurate diagnosis and appropriate treatment. The withholding of information can impede the healthcare provider's ability to make well-informed decisions and may result in suboptimal care for the elderly patients [6].

Legal and ethical implications: Poor treatment of the elderly in hospitals can raise legal and ethical concerns, further eroding trust in the healthcare system. Elderly patients have the right to receive dignified and respectful care, and when those rights are violated, it can lead to legal actions against healthcare providers or institutions. Ethically, it is the responsibility of healthcare providers to ensure the well-being and safety of all patients, including the elderly [2].

Rebuilding trust requires healthcare providers to address the root causes of poor treatment and

prioritize patient-centered care. This includes fostering open communication, actively listening to the concerns of elderly patients, involving them in decision-making, and demonstrating empathy and respect. Transparent policies and procedures that prioritize patient rights and safety can also contribute to rebuilding trust in the healthcare system. By acknowledging the impact of poor treatment on trust and actively working to improve the care provided to the elderly, healthcare providers can restore confidence and ensure better healthcare experiences for this vulnerable population.

4. ETHICAL AND LEGAL CONSEQUENCES:

Poor treatment of the elderly in hospitals not only has immediate negative impacts on their well-being but also carries significant ethical and legal consequences for healthcare providers and institutions. Failing to provide adequate care and respect for elderly patients violates their rights, undermines ethical principles, and can lead to legal ramifications. Here are some key ethical and legal consequences of poor treatment [12]:

- Violation of patient rights: Every patient, regardless of age, has the right to receive appropriate and dignified care. Poor treatment of the elderly in hospitals can infringe upon these rights, including the right to be treated with respect, the right to informed consent, and the right to privacy and confidentiality. Neglect, abuse, or disregard for patient autonomy violates ethical principles and undermines the foundation of healthcare ethics.
- Breach of duty of care: Healthcare providers have a legal and ethical duty to provide a certain standard of care to their patients. When poor treatment occurs, it can be considered a breach of this duty. Negligence, such as failing to provide necessary medical attention, not following established protocols, or disregarding patient safety measures, can result in legal actions against healthcare providers and institutions.
- Potential for lawsuits and legal actions: Poor treatment of the elderly in hospitals can lead to lawsuits and legal actions filed by affected patients or their families. If it can be demonstrated that the poor treatment resulted in harm, injury, or violation of patient rights, legal action may seek compensation for medical expenses, pain and suffering, or other damages. Such legal actions can have significant financial and reputational implications for healthcare providers and institutions.
- Damage to professional reputation: When instances of poor treatment become known, healthcare providers and institutions may face damage to their professional reputation. Negative publicity and public perception can lead to decreased trust from patients, families, and the community at large. This can have far-reaching consequences, including

decreased patient volume, difficulty in recruiting and retaining healthcare professionals, and strained relationships with other healthcare stakeholders.

- Ethical considerations for future care: Poor treatment of the elderly in hospitals raises ethical considerations for future care. It highlights the importance of upholding ethical principles, such as respect for patient autonomy, beneficence, and non-maleficence. It also emphasizes the need for improved training and education of healthcare providers regarding the unique needs and vulnerabilities of elderly patients.

To mitigate ethical and legal consequences, healthcare providers and institutions should prioritize ethical practices, establish clear policies and protocols for patient care, and foster a culture of respect and compassion. Regular staff training, effective communication, and accountability mechanisms are essential for ensuring ethical and legal compliance in the care of elderly patients. By upholding ethical principles and adhering to legal obligations, healthcare providers can minimize the negative consequences associated with poor treatment and promote patient-centered care for the elderly.

5. THE PASSIVE ROLE OF THE NURSE IN THE CARE TEAM

The passive role of the nurse in the care team can have various implications for patient care and outcomes. Here are some key points related to this issue[3]:

- Communication and Collaboration: When nurses take a passive role in the care team, it can lead to communication breakdowns and a lack of collaboration. Active involvement of nurses is crucial for effective interdisciplinary communication, sharing of important patient information, and collaborative decision-making.
- Patient Advocacy: Nurses play a vital role in advocating for their patients and ensuring their needs are met. When nurses are passive, there is a risk of overlooking patient concerns, preferences, and rights. Active advocacy by nurses can help address patient needs, promote their well-being, and enhance patient-centered care.
- Care Planning and Implementation: Nurses are responsible for planning and implementing patient care interventions. If they take a passive role, there is a possibility of inadequate care planning, missed interventions, and suboptimal patient outcomes. Active participation of nurses is essential for developing comprehensive care plans and ensuring their effective implementation.

Monitoring and Assessment: Continuous monitoring and assessment of patient conditions are critical for early detection of complications or changes in health status. Passive nurses may not be as vigilant in monitoring patients, potentially leading to delayed identification of problems and compromised patient safety.

Patient Education and Empowerment: Nurses play a crucial role in educating and empowering patients to actively participate in their own care. When nurses are passive, patient education and engagement may be neglected, resulting in reduced patient empowerment and potentially poorer health outcomes.

Addressing the passive role of nurses in the care team requires fostering a culture of collaboration, communication, and empowerment within healthcare settings. It involves promoting active participation, assertiveness, and advocacy skills among nurses. Additionally, supportive leadership, clear roles and responsibilities, and ongoing professional development can contribute to nurses taking a proactive and engaged role in the care team, ultimately improving patient care and outcomes.

6. LACK OF SPECIALIZED KNOWLEDGE OF ELDERLY CARE

The lack of specialized knowledge of elderly care among healthcare professionals can have significant negative consequences for the treatment and wellbeing of elderly patients in hospitals. This issue encompasses various aspects, including medical, psychological, and social considerations. Here are some key implications of the lack of specialized knowledge [8]:

- Inadequate Assessment and Diagnosis: Healthcare professionals with limited knowledge of elderly care may struggle to appropriately assess and diagnose age-related conditions and diseases. Elderly patients often present with atypical symptoms or multiple comorbidities, making accurate diagnosis challenging without specialized knowledge. This can result in delayed or incorrect treatment plans, compromising patient outcomes.
- Medication Management: Elderly patients typically require multiple medications and age-related physiological changes can affect drug metabolism and tolerance. Healthcare professionals lacking specialized knowledge may not be aware of these nuances, leading to inappropriate medication choices, dosing errors, and increased risk of adverse drug reactions. Proper medication management is crucial to prevent drug interactions and optimize therapeutic outcomes.
- Prevention and Management of Geriatric Syndromes: Geriatric syndromes such as falls, delirium, malnutrition, and pressure ulcers are common among the elderly. These conditions require specialized knowledge and targeted interventions for effective prevention and management. In the absence of such knowledge, healthcare professionals may overlook preventive measures or fail to provide appropriate care, leading to the worsening of these syndromes and negative health outcomes [11].
- Communication and Psychosocial Support: Elderly patients may have unique communication

needs and psychosocial challenges related to aging, cognitive decline, sensory impairments, and emotional well-being. Lack of specialized knowledge in elderly care can hinder effective communication and psychosocial support, resulting in misunderstandings, decreased patient satisfaction, and increased psychological distress.

- Coordination of Care and Transitions: The elderly often requires complex and coordinated care involving multiple healthcare providers and settings. Without specialized knowledge, healthcare professionals may struggle to effectively coordinate care, leading to fragmented and uncoordinated services. This can compromise continuity of care, increase the risk of medical errors, and contribute to patient and caregiver stress.

Addressing the lack of specialized knowledge of elderly care requires comprehensive geriatric education and training for healthcare professionals. This includes understanding age-related changes, tools, assessment evidence-based geriatric management and effective approaches, communication strategies. By investing in specialized training, hospitals can improve the quality of care provided to elderly patients, enhance patient safety, and promote positive health outcomes.

6.CONCLUSION

In conclusion, the poor treatment of the elderly in hospitals can have significant negative consequences. The physical consequences include increased vulnerability to infections, pressure ulcers, and mobility issues. The emotional and psychological consequences involve feelings of fear, anxiety, and depression, which can further deteriorate their overall well-being.

Moreover, the deterioration of trust in the healthcare system is a critical consequence. When elderly patients experience poor treatment, it erodes their confidence in the healthcare providers and institutions, making them hesitant to seek medical care in the future. This breakdown in trust can have far-reaching implications for the healthcare system as a whole.

Additionally, ethical and legal consequences are associated with poor treatment of the elderly. It violates their rights to dignity, respect, and quality care. Healthcare professionals and institutions may face legal repercussions for negligence, abuse, or malpractice, further tarnishing their reputation and potentially leading to legal action.

To address these negative consequences, it is crucial to prioritize the well-being and dignity of elderly patients in hospitals. This requires comprehensive training for healthcare professionals on geriatric care, promoting a patient-centered approach, and establishing protocols that ensure the provision of

high-quality, compassionate, and age-appropriate care.

By recognizing and addressing the negative consequences of poor treatment, we can work towards creating a healthcare system that values and respects the elderly, ensuring they receive the care and support they deserve during their vulnerable times. Our collective responsibility is to advocate for the rights and well-being of the elderly population and strive for a healthcare system that promotes their health, dignity, and overall quality of life.

REFERENCES

- [1] Abbas Heydari, Mohammad Hesam Sharifi, Ahmad Bagheri Moghaddam (2019). Challenges and Barriers to Providing Care to Older Adult Patients in the Intensive Care Unit: A Qualitative Research, Open Access Maced J Med Sci. 2019 Nov 15; 7(21): 3682–3690
- [2] Abbey G, Fisher PL, Byrne A, Fairburn L, Ullmer H, Salmon P.(2019). Brief Metacognitive Therapy for Emotional Distress in Adult Cancer Survivors. Front Psychol. 2019 Jan 31; 10:162. doi 10.3389/fpsyg.2019.00162. PMID: 30766505; PMCID: PMC6365419.
- [3] Abudu-Birresborn D, McCleary L, Puts M, Yakong V, Cranley LJIJoNS. (2019), Preparing nurses and nursing students to care for older adults in lower and middle-income countries: A scoping review. International Journal of Nursing Studies. 2019; 92:121–34.
- [4] Bunn, F., Goodman, Russell, B. et al. (2018), Supporting shared decision making for older people with multiple health and social care needs: a realist synthesis. BMC Geriatr 18, 165. https://doi.org/10.1186/s12877-018-0853-9
- [5] Carney T, Tait D, Wakefield A, Ingvarson M, Touyz S. (2005), Coercion in the treatment of anorexia nervosa: clinical, ethical and legal implications. Med Law. 2005 Mar;24(1):21-40. PMID: 15887611.
- [6] Geoffrey J. Hoffman, Noah J. Webster & Julie P. W. Bynum (2020) A Framework for Aging-Friendly Services and Supports in the Age of COVID-19, Journal of Aging & Social Policy, 32:4-5, 450-459, DOI: 10.1080/08959420.2020.1771239
- [7] Donna M. Wilson, Begona Errasti-Ibarrondo, Gail Low Pauline O'Reilly, Fiona Murphy, Anne Fahy, Jill Murph. (2020), Identifying contemporary early retirement factors and strategies to encourage and enable longer working lives: A scoping review, international journal of older people nursing. 12 March 2020,https://doi.org/10.1111/opn.12313
- [8] Kim J, Choi SM, Park YS, Lee CH, Lee SM, Yim JJ, et al. (2016), Factors influencing the initiation of intensive care in elderly patients and their families: A retrospective cohort study. Palliative Medicine. 2016 [9] Krot K, Rudawska I. (2021), How Public Trust in Health Care Can Shape Patient Overconsumption in Health Systems? The Missing Links. Int J Environ

- Res Public Health. 2021 Apr 7;18(8):3860. doi 10.3390/ijerph18083860. PMID: 33916992; PMCID: PMC8067686.
- [10] Lee EA, Gibbs NE, Fahey L, Whiffen TL. (2013). Making hospitals safer for older adults: updating quality metrics by understanding hospital-acquired Delirium and its link to falls. Perm J. 2013;17(4):32–6.
- [11] Rejeh N, Heravi-Karimooi M, Foroughan M.(2010). The Needs of Hospitalized Elderly Patients: A Qualitative Study. Iranian Journal of Ageing. 2010 [12] S. Rosenbaum, B. Stubbs, Davy V., L. Smith, F. Schuch, J. (2018), Firth. Physical activity and mental health. VOLUME 5, ISSUE 11, P873, NOVEMBER 2018, DOI:https://doi.org/10.1016/S2215-0366(18)30343-2
- [13] T. Gallagher, Sevilla-Cazes, J., Ahmad, F.S., Bowles, K.H. (2018), Heart Failure Home Management Challenges and Reasons for Readmission: a Qualitative Study to Understand the Patient's Perspective. J GEN INTERN MED 33, 1700–1707 (2018). https://doi.org/10.1007/s11606-018-4542-3