



# **Case Study**

Student's Name

Institution Affiliation



## Introduction

Statistics indicate that falls are some of the leading causes of death among older people. Falls result in many accidental deaths translating to high healthcare costs. For most of the older people, falls are prevalent risks as the person goes through everyday activities. As a result, most of the older people may fear going out or walking in their home. In such cases, there is a need to implement prevention strategies to reduce the fall risks. The paper analyses the case study of an 80-yearold woman named Opal Smith that is struggling with mild hearing loss, Osteoarthritis, hypertension, and type 2 diabetes. Smith has various symptoms, including unsteadiness of walking and bilateral mild knee pain. Based on Mrs. Smith's case study, the paper evaluates Mrs. Smith's major fall risk factors and recommends interventions that would help to reduce her risks.

## **Major Risk Factors**

Mrs. Smith's risk factors can be classified into three major categories comprising of demographic factors, historical factors, and physical deficits. The demographic factors include older age and living alone. Mrs. Smith is 80 years old. Studies suggest that people older than 75 years have a high risk of falling (Saim, 2014). The physiologic changes that come with age increase fall risks. For instance, as people age, the functional reserve of the mental and physical changes decreases. As a result, Saim (2014) indicates that older people have a high risk of falling when confronted with challenges. Furthermore, living alone is another risk factor for Mrs. Smith. Since the death of her husband, Mrs. Smith has been living alone. It exposes her to falls in areas such as the staircase and walking on slippery floors (Saim, 2014).

The historical factors include chronic diseases such as Osteoarthritis and exposure to various medications that may cause fall-related symptoms (Hart-Hughes et al., 2004). Osteoarthritis results in stiffness and pain of the joints, causing movement difficulties. The condition damages the joints effectively increasing the probability of falling. Moreover, older people taking more than three medications for various chronic diseases are susceptible to falls (Hart-Hughes et al., 2004). Mrs. Smith takes 10 mg of Lisinopril daily, diphenhydramine, acetaminophen, and a multivitamin among other medications. Research suggests that some of the drugs such as Lisinopril and diphenhydramine, cause dizziness and drowsiness that may cause falls. An older person prescribed to take all these medications in the same period has higher risks of falling (Hart-Hughes et al., 2004).

The physical defects comprise unsteadiness on walking, bilateral knee pain, slowed gait, and mild crepitus on her knees. All these factors affect her movement (Al-Faisal, 2006). For example, the mild crepitus and bilateral knee pain make it difficult to walk

while the unsteadiness affects her balance. Therefore, these factors increase her risks of falling.

## **Interventions to Minimize Risks**

Various intervention programs can help to minimize Mrs. Smith's falling risks. Some of the primary approaches include exercises and physical activities. The assessment does not indicate whether Mrs. Smith is involved in any physical activities or exercises AI-Faisal (2006) argue that increasing her engagement in physical activities can help to improve her balance, physical strength, and coordination, thereby reducing her risks for falls. The Tai Chi technique is the commonly used technique for improving balance, coordination, and physical strength (AI-Faisal, 2006). Mrs. Smith could incorporate the method into her programs to help her improve her balance and strength. Other exercise programs that she should adopt comprise developing an individual walking plan with the help of a doctor, balance training, and progressive muscle strengthening (AI-Faisal, 2006).

The second intervention regards conducting environmental modifications. Mrs. Smith's living alone exposes her to many fall risks at home. As a result, Morris et al. (2016) indicate that there is a need to address the home hazards that may increase Mrs. Smith's falling risks. Mrs. Smith could have home-visiting programs that could help to reduce the potential risks. The programs would provide the nurses with an opportunity to identify the potential hazards and implement corrective action (Morris et al., 2016). In instances where the stairs are identified as potential hazards, the nurses can recommend the installation of lifts to help with the movement to the upper floors. Studies indicate that home hazard modification approaches help to reduce falls by more than 20% (Morris et al., 2016).

Moreover, Mrs. Smith should adopt multi-factorial interventions targeting personal and environmental safety. These interventions could include improving footwear, flooring, and home lighting (Saim, 2014). With guidance from trained personnel, she could acquire hip protectors to protect her hips in case of any falls. Additionally, Mrs. Smith could go for gait training and seek advice to help her to use assistive devices appropriately (Saim, 2014).

Researchers suggest that the use of many medications for chronic diseases at old age is associated with increased falls. Mrs. Smith should consider withdrawing the medicine to avoid side effects such as dizziness and drowsiness (Hart-Hughes et al., 2004). Findings indicate that the withdrawal of medications such as diphenhydramine reduces the risk of falling by 66% within two weeks (Hart-Hughes et al., 2004). After the removal, certified nurses should recommend alternative treatments to help manage chronic conditions. Other approaches that could prove useful to Mrs. Smith include the use of nutritional supplements and group exercise programs (Hart-Hughes et al., 2004).

## Conclusion

The above analysis identifies that Mrs. Smith has various risk factors such as old age, use of chronic disease medications, and knee pain, among others. Various interventions could help to reduce her risk factors. They include medication withdrawal.



## References

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