Exploring the status of treating chronic pain among elderly patients hospitalized in internal medicine wards in Saudi Arabia

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ABSTRACT
The elderly population experience many health issues that range from emotional, psychological to physiological conditions. Previous studies reveal that chronic pain is among the major health issues affecting old people. The processes of managing chronic pain among the elderly have proven to be challenging practices since individuals exhibit different health complications in advanced age. Saudi Arabia is among the countries that have made progressive improvements to the approaches employed to address chronic pain. Thus, exploring the status of elderly patients experiencing chronic pain in three major hospitals in Saudi Arabia is an educational strategy to understand the situation both in the middle east and the rest of the world. The notable chronic ailments associated with the elderly in Saudi Arabia include diabetes, back pain, and depression. Several studies have shown that the systems for treating older adults that suffer from chronic pain in Saudi Arabia are effective. The study used the 20-item pain anxiety symptom scale (PASC) to assess chronic pain for 53 patients drawn from King Fahad Hospital in Jeddah, Asir Central Hospital, and King Khaled hospital in Najran. The study revealed that chronic pain causes fear, inability to think properly, and lack of sleep, among other issues. Apparently, the study borrows from others done outside Saudi Arabia to explore the issue problem in a broader spectrum. The understanding of chronic pain status is an inevitable exercise towards establishing effective pain management programs or systems.

INTRODUCTION
Chronic pain also acknowledged as persistent pain, which lasts within an individual for more than 3 months (Al-Maharbi et al., 2018). The study aimed at exploring the status of treating chronic pain amid the elderly patients, who are hospitalised in Saudi Arabia’s internal medicine department. Evidence suggests that in this regard, the elderly patients hospitalised in internal medicine in Saudi Arabia mainly suffer pain from various diseases, including depression and diabetes, among others. Based on
the reported 12-month occurrence rates among the hospitalised elderly patients in Saudi Arabia, it has been apparent that 7% to 28% and 4% to 17% of them face chronic pain, which is mainly due to depression and anxiety respectively (Al-Maharbi et al., 2018). In Saudi Arabia, it is projected that the numbers of elderly people would increase in the future, thereby raising the scope of more hospitalisation in the internal medicine department (Qahtani, 2014). The elderly patients belonging to Saudi Arabia are mainly hospitalised in the internal medicine department with health disorder with respect to low back pain (LBP). This particular health issue is likely to affect 25.1% and 35.1% of men and women correspondingly in Saudi Arabia (Awwad et al., 2017).

Based on the observation made by (Senany et al., 2015), the status of treating chronic pain amid the elderly patients hospitalised in Saudi Arabia’s internal medicine department is effective. This is owing to the reason of improved healthcare system, increased use of effective medicines, and quality training provided to the nurses regarding treatment as well as care management. Apart from the medicines, usage of herbal treatment cannot also be ignored while analysing the status of treating chronic pain among the elderly patients, who are admitted in the kingdom’s internal medicine department (Alghamdi et al., 2018).

**Ethics Approval**

For this study, all procedures were in accordance with the ethical standards of the Scientific Research Ethics Committee for Saudi Universities and with the 1964 Helsinki declaration and its later amendment.

**MATERIALS AND METHODS**

**Research Methodology**

To explore the status of treating chronic pain among elderly patients hospitalised in internal medicine wards in Saudi Arabia, the researcher will use the following tools

*Figure 1: Research Design*

4. Living arrangement ( Alone, with a spouse, with sons, with spouse and sons, other).

5. BMI (body mass index) at admission.

6. SL (severity index) at admission.

7. CT (comorbidity type) at admission.

8. BI at admission.

9. Psychological status at admission.

10. Duration of hospital stay.

11. Status of the patient at discharge (Discharge, discharge critical condition, transferred, dead).

12. Type of drugs provided.

13. The total number of drugs.

**Interviews**

semi-structured interviews will be conducted with both patients (elderlies) and medical services providers (nurse staff and physicians). The information will be related to

1. The common type of pain amongst elderlies.

2. The level of pain amongst elderlies.

3. The frequency of visiting the hospital.

4. The level of medical services provided.

**Research Sample**

Three big different hospitals in Saudi Arabia (King Fahad Hospital in Jeddah, Asir central Hospital and King Khaled hospital in Najran).
Figure 2: Q1 I can't think straight when in pain

Figure 3: Q2 During painful episodes it is difficult for me to think of anything besides the pain?

Figure 4: Q3 When I hurt, I think about pain constantly

Figure 5: Q4 I find it hard to concentrate when I hurt

Figure 6: Q5 I worry when I am in pain

Figure 7: Q6 I go immediately to bed when I feel severe pain
Figure 8: Q7 I will stop any activity as soon as I sense pain coming on

Figure 9: Q8 as soon as Pain comes on, I take medication to reduce it

Figure 10: Q9 I avoid important activities when I hurt

Figure 11: Q10 I try to avoid activities that cause pain

Figure 12: Q11 I think that if my pain gets too severe it will never decrease

Figure 13: Q12 When I feel pain, I am afraid that something terrible will happen
Figure 14: Q13 When I feel pain, I think I might be seriously ill

Figure 15: Q14 Pain sensations are terrifying

Figure 16: Q15 When pain comes on strong, I think that I might become paralyzed or more disabled

Figure 17: Q16 I begin trembling when engaged in activity that increases pain

Figure 18: Q17 Pain seems to cause my heart to pound or race

Figure 19: Q18 When I sense pain, I feel dizzy or faint
RESULTS AND DISCUSSION

The status of chronic pain treatment among 53 hospitalized elderly Saudi patients was assessed using the 20-item pain anxiety symptom scale (PASC). When asked whether the pain affects their straight-thinking, 41.51% responded sometimes, 30.19% said usually, and 13.21% always responded; with 9.43% responding and 5.66% never (Figure 2). When further asked whether they think about nothing else other than pain during painful episodes, a majority still sometimes responded (43.40%), usually (28.30%) and always 15.09%; with the minority rarely responding (9.43%) or never (3.77%) (Figure 3). The responses were similar to the above items when alternatively, asked whether when hurt, they constantly thought about pain, with majority sometimes responding (41.51%), usually (33.96%) and always 9.43%; with the minority rarely responding (9.43%) or never (5.66%) (Figure 4). However, when further asked whether they find it hard to concentrate when hurt, the majority reported usually (39.62%), always or sometimes (24.53%), with a minority responding never or rarely (5.66%) (Figure 5). After asking patients about pain-precipitated anxiety, a majority responded that they get worried when in pain, with most patients usually responding (32.08%), always (26.42%) or sometimes (22.64%) and the least rarely responding (13.21%) or never (5.66%) (Figure 6). This pattern of pain-precipitated worry appeared to influence their decision regarding going to bed immediately when there is severe pain. In this case, the majority sometimes responded (28.30%), usually or always (26.42%) with the minority rarely responding (13.21%) or never (5.66%) (Figure 7). The responses regarding going to bed when in severe pain appeared inconsistent with those regarding the decision to stop their activities upon sensing an impending pain. In that case, a substantial majority responded sometimes (41.51%), rarely (16.98%) or usually (11.32%) with substantial minority responding always/never (15.09%) or (16.98%) (Figure 8). By contrast, the responses regarding going to bed when in severe pain were, however, consistent with their responses on taking pain-relieving medication as soon as pain ensues; with a substantial majority sometimes responding (32.08%), always (15.09%) or usually (16.98%) with substantial minority reporting rarely (20.75%) or never (15.09%) (Figure 9). Responses on the decision to stop their activities upon sensing an impending pain were consistent with responses regarding avoiding important activities when hurt, with majority sometimes responding (39.62%), always (16.98%) or usually (15.09%); and the minority rarely responding (13.21%) or never (15.09%) (Figure 10). These are further consistent with responses regarding avoidance of activities that cause pain, with the majority usually responding (35.85%), always (22.64%) or sometimes (20.75%) and the remaining minority rarely responding (18.87%) or never (1.89%) (Figure 11).

About patient’s pain treatment expectations. They responded that when in too severe pain the majority responded that they sometimes (47.17%) usually (7.55%) or always (5.66%) think that the pain can never decrease; with a substantial minority never responding (28.3%) or rarely (11.32%) (Figure 12). However, a substantial majority responded that they were sometimes (33.96%), never (22.64%) or rarely (15.09%) afraid that something terrible could happen when they feel pain; with the minority usually responding (18.87%) or always (9.43%) (Figure 13). However, enquiring when their pain was an indication that they might be seriously ill, the responses were heterogeneous; with nearly equal

Figure 20: Q19 Pain makes me nauseous

Figure 21: Q20 I find it difficult to calm my body down after periods of pain
proportions usually responding (22.64 %), sometimes (22.64 %), rarely (26.42 %), or never (18.87 %) with a very small group always responding (9.3 %) (Figure 14). On the same aspect, the majority never (49.06 %), rarely (18.87 %) or sometimes (22.64) thought that when their pain intensity increased, they might become paralyzed or more disabled. The minority always responded (7.55 %) or usually (1.89 %) (Figure 15).

When questioned about whether their pain sensations were terrifying majority of the patients agreed, responding: sometimes (35.84 %), usually (32.08 %) or always (16.98%); with minority disagreeing with never (5.66 %) and rare (9.53 %) responses (Figure 16). However, there seems to be uncertainty regarding the question as to whether the patients trembled when engaging in activities known to increase pain. In that case, a majority were unsure, sometimes responded (43.40 %), with the remaining responses being split between never or rarely (13.21 % or 20.75%) and usually (16.98) or always (5.66 %) (Figure 17).

On matters about the impact of their pain on their cardiological or respiratory outcome, the majority of the patients responded that sometimes (35.85 %), rarely (30.19 %) or never (5.66 %) the pain cause their hearts to pound or race; with a substantial minority usually responding (18.87 %) or always (9.43%) or never (5.66 %) (Figure 18). These responses were quite similar to those regarding whether pain causes dizziness or fainting. In this case, a majority sometimes responded (41.51 %) usually (18.87 %) or always (5.66 %), with a substantial minority responding never or rarely (16.98 %) (Figure 19). Similarly, the majority responded that the pain sometimes (30.19 %), never or rarely (24.53 %) makes them nauseous, with a minority usually responding (11.32 %) or always (9.43 %) (Figure 20). Lastly, the majority of the patients responded that they sometimes (43.40 %) find it difficult to calm down their bodies after periods of pain; with substantially higher proportion responding rarely (16.98 %) or never (15.09 %) compared to those responding usually (15.09 %) or always (9.43 %) (Figure 21).

In 2011 a study was conducted in Canada to measure the prevalence of chronic pain among the Canadian population, the study showed that the prevalence of chronic pain among adults (18+ years old) was 18.9%. The study also indicated that the chronic pain prevalence was greater in older adults; females had a higher prevalence at older ages compared with males. Moreover, around half of those with chronic pain reported suffering for more than 10 years. Roughly one-third of those reporting chronic pain rated the intensity in the very severe range. The study also revealed that Lower Back Pain (LBP) was the most common site of chronic pain (CP), and arthritis was the most frequently named cause (Schopflocher et al., 2011).

The study also concluded that the high prevalence of CP within adult populations in industrialized nations when the prevalence questions were carefully formulated and administered to large samples. Unfortunately, it also calls attention to the fact that a substantial proportion of Canadian adults live with CP that was longstanding and severe.

In July 2013, another study was revealed in California in USA, the study was measuring the Functional Disability among Chronic Pain Patients Receiving Long-Term Opioid Treatment, the study showed the roles of depression and important demographic characteristics in functional disability and employment status among chronic pain patients receiving long-term opioid therapy (Valkanoff et al., 2012)

The study showed that men had lower odds of having a functional disability compared to women. For every year increase in age, the odds that an individual has 30 or more days of limited activity increased by 2% and the odds that he or she is unable to work due to health reasons increased by 4%. Participants with at least some college education had 45% lower odds of being unemployed due to health reasons compared to those with lower levels of education. Individuals with more depression symptoms (high depression) had higher odds of having a worse functional disability as gauged by all three measures (Valkanoff et al., 2012). In April 2017, a study was carried out in Tehran in Iran to investigate the Chronic Pain in Chronic Heart Failure (HF). The study showed that chronic pain was a common symptom in patients with HF and had a remarkable impact on various aspects of the management modalities of these patients; optimal control of pain is impossible. Further investigations were needed to find a safe and efficacious way for controlling pain in patients with HF (Alemzadeh-Ansari et al., 2017). Another study was conducted in Oxford University to estimate the Prevalence and Relevance of Pain in Older Persons, the study indicated that improved knowledge for both health professionals and patients, addressing the current research gaps and expansion of age-appropriate pain management services will be required to better meet the needs of our rapidly ageing population (Gibson and Lussier, 2012).

The study also showed that pain was most common during the late-middle-aged phase of life (55-
65 years) and continues at approximately the same prevalence into older age (65+). This was true regardless of the anatomical site or the pathogenic cause of pain. The study mentioned that there was one exception appeared to be pain associated with degenerative joint disease (such as osteoarthritis) which showed an exponential increase until at least 90 years of age. Common age-associated conditions like dementia may result in a reduced frequency and intensity of pain. The study showed that daily pain was a major risk factor for developing a disability and the oldest age cohorts are most vulnerable. Discretionary and higher-order physical activities appear most affected, while basic activities of daily living may be modified but are rarely ceased altogether. Similar relationships have been documented for risk of depression and mood disturbance in older persons with persistent pain. Despite such well-characterized adverse impacts, pain often remains poorly treated in older persons. This occurs across all health care settings examined (emergency, acute, outpatient, long-term care) (Gibson and Lussier, 2012).

Another study was conducted in Texas in the USA, contributed to the literature in three main areas. The first contribution is the finding on the short amount of time spent on discussing chronic pain with older adults – the median length is only 2.3 minutes (standard deviation= 3 minutes, minimum=6 seconds, maximum=15.4 minutes) for the combined talk time by physician and patient. When we separate out the time spoken by physician versus patient, we find that physicians spoke for less than a minute (0.8 minutes) whereas patients spoke for 1 minute (Tai-Seale et al., 2011).

The second contribution was the high prevalence of chronic pain discussion among older patients in usual office visits in primary care – 48% of the visits involved at least one pain topic. While the third contribution was the priority given to discussing chronic pain – 55% of the chronic pain topics were raised during the first three topics of the visit with older patients. Despite the importance of chronic pain that could be inferred from the prevalence and the priority, the actual amount of time spent on chronic pain was quite minimal (Tai-Seale et al., 2011).

CONCLUSION

Older adults in most parts of the world are vulnerable to chronic pains. The approaches employed to address pain among the aged should look beyond the capacity building to how good the existing and emerging programs can benefit those already in pain. Also, hospitals should partner with society to initiate community health programs for managing pain, especially among people aged above sixty years. Health is an inevitable factor in determining the quality of life of an individual, irrespective of age or economic endowment. Therefore, progressive developments should be made in projects that focus on pain management. Essentially, there is no single approach known for treating pain; hence, stakeholders in the health sector can only embrace programs that focus on pain management. Moreover, the government, private sector, hospitals, and society should work together in developing policies and programs that can aid in the management of chronic pain. The elderly population is part of the community; therefore, the relevant stakeholders should ensure that this group of people enjoy a quality life that is free from chronic pain.

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