

Research Article

Journal of Emergency Medicine: Open Access**Knee Osteoarthritis, Pain Anxiety and Falls Interactions: Overview, Implications, and Emergency Medicine Opportunities**Ray Marks* OARC Clinical Research and Education Director,
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5H3, Canada.**Submitted:** 2026, Jun 05; **Accepted:** 2026, Jul 13; **Published:** 2026, Jul 22**Citation:** Ray, M. (2026). Knee Osteoarthritis, Pain Anxiety and Falls Interactions: Overview, Implications, and Emergency Medicine Opportunities. *J Emerg Med OA*, 4(2), 01-10.**Abstract**

Knee osteoarthritis, the most common form of this disabling joint disease is often associated with an increased tendency to fall and sustain various degrees of injury or injuries that hasten joint attrition as well as tendency towards recurrent falls. But what does the current research show specifically? Building on former efforts using the **PUBMED** data base and others, we have observed a strong link between the presence of a high falls risk and osteoarthritis of the knee that may stem from features of the disease such as possible pain anxiety. These linkages that may be bidirectional-that can hasten a form of post traumatic knee joint destruction that can only be partially remedied by surgery. Even then, emergent or ongoing unrelenting bouts of pain anxiety may seriously undermine this effort as well as ensure a high rate of recurrent falls. This overview elaborates on pain-anxiety and its linkages with falls that induce great suffering and widespread costly public health implications, including excess Emergency Room visits and resource usage.

Keywords: Anxiety, Emergency Medicine, Falls, Fall Injuries, Falls Risk Factors, Knee Osteoarthritis, Pain, Prevention**1. Introduction**

Osteoarthritis, a universally prevalent age associated disabling disease, commonly affecting one or both knee joints is frequently associated with various degrees of pain plus oftentimes a progressive loss of mobility and the ability of the affected person to function physically. In addition, the disease may induce multiple localized joint destructive alterations that render the affected knee[s] unstable or unprotected or both. Other disabling features that may emerge or increase in severity over time include joint swelling and inflammation of varying degrees, joint stiffness, joint malalignment, joint ligament laxity, joint deformities, alterations in joint sensibility, and the vital efficient contractile nature of the surrounding knee muscles. In addition, gait abnormalities, and often a strong tendency for one or more affected cognitive factors, such as anxiety, a knee that 'gives way' and a high risk of falls associated fractures, as well as heightened osteoarthritis bone attrition may ensue [1-4]. At the same time, prevailing diseases commonly associated with both aging and osteoarthritis such as depression, diabetes, sarcopenia, and cardiovascular diseases can all potentially increase the risk of an affected older adult to sustain an injurious fall, as well as recurrent falls (≥two

falls/year) that are of particular concern due to their impact on morbidity and independence [1,5,6]. Other related disease factors including unrelenting pain, the lack of adequate high quality sleep, inactivity and disease associated muscle mass declines, obesity or frailty, plus possible medication heightened confusion or excess pain masking can facilitate the occurrence of an unwanted and unanticipated falls event [2,7,8]. In addition to this, the degree to which reactions to pain engender high levels of pain-anxiety that induce movement fears and inactivity can engender a serious state of cascading events where knee osteoarthritis either manifests or is exacerbated and where bone fractures and fears of falling greatly diminish life opportunities and quality.

At the same time, and in the face of rising health care costs and the drain on personnel and limited health resources, high numbers of aging adults worldwide who seek to age successfully and 'in place' rather than an institution may not be able to do this unless more is done to avert those determinants that lead to falls that occur in the home or community and affect rising numbers of high age adults [6-8]. Moreover, as time progresses, cases with severe osteoarthritis who must often rely on joint replacement surgery- a

procedure that is costly in its own right can yet experience one or more falls occurrences alongside pain and post surgical muscle atrophy and the evocation or perpetuation of anxiety [1,9].

2. Research Questions

- Is there any agreed upon linkage between knee osteoarthritis pain and pain-anxiety, and falls that could be harnessed towards more effective falls and/or osteoarthritis prevention efforts. If so, what general approaches might be desirable?
- Will careful directive by Emergency Responders help to avert future falls events in those older adults with knee osteoarthritis who fall repeatedly and thereby improve to some degree the outlook for older adult with knee osteoarthritis disability and a high falls risk?
- Since falls associated with knee osteoarthritis can magnify or induce a life time of suffering, plus account for significant proportion of health costs, should more emphasis on this possible preventable health association be forthcoming? That is, is there evidence that a strong case can be made for more public health investments towards well designed and resourced efforts to mitigate the possible cycle of excess knee osteoarthritis progression, plus persistent or recurrent fall-associated injuries? [8].
- Moreover, if preventive strategies do exist are they grounded in a strong evidence base or are they too general, or of high merit-but not followed, contemplated or actively avoided by adults with knee osteoarthritis because they are seen as 'stigmatizing'? [10].

3. Rationale

Both knee osteoarthritis as well as falls injuries currently pose an enormous challenge to many aging individuals worldwide, as well as tremendous challenges to health providers in multiple spheres, plus immense public health hospital and societal resource and remediation costs. At the same time, the disease may impact life quality, as well as the ability to live independently in the community and thus to carry out much needed self-care strategies advocated for this condition where older adults with radiographic evidence of knee osteoarthritis have an increased likelihood of experiencing recurrent falls in comparison to those without the affirmed disease independent of established risk factors [12]. But what key determinant produce a high falls risk such that even a single episode can impact future life quality and outcomes as well as expectations most severely and impact fully while engendering high levels of possible pain, movement fears, as well as movement challenges is not well understood.

Since outcomes for knee osteoarthritis sufferers' who fall are found to be significantly worse than those who don't, and surgery to replace a diseased osteoarthritis damaged knee does not always prevent falls post surgery, we believe a better understanding of what specific variables might be amenable to intervention in at risk individuals would undoubtedly be highly advantageous in the context of primary, as well as secondary and tertiary preventive efforts, regardless of the presence of knee osteoarthritis [11,12]. Moreover, since falling, as well as excess pain and disability that

can arise due to falls are important mediating causes of premature mortality and morbidity in some advanced age vulnerable adults, the more routine assessment of risk factors for falling followed by effective targeted and tailored strategies to prevent these appear of high salience to consider in the context of primary disabling knee osteoarthritis.

4. Hypothesis

As a basis for this report we hypothesized there would be a consistent cyclical linkage between the onset and progression of disabling knee osteoarthritis and falls occurrences in the older population that can be directly or indirectly mediated by neuromuscular factors and others that may be remediable such as pain and anxiety. The term anxiety which describes a generic term denoting a state of negative affectivity and one encompassing several common mental health disorders such as Generalized Anxiety Syndrome is a psychological state commonly associated with excess fears, and worry. As well as trait anxiety, a possible emotionally generated reactive state of heightened arousal (termed state anxiety) may arise even in the absence of any anxiety history, especially in the face of unrelenting pain. In both cases, anxiety when present often induces multiple intrinsic debilitating functional impacts, and subnormal thoughts, concerns, and behaviors, and is one often engendered not only by a real threat, but by a perceived threat or state of negative affectivity that may have a strong bearing on falls risk mediators such as muscle force generation, as well as pain [17].

5. Methods

To address the current line of inquiry, the desired data believed to address the key questions posed in this mini review were sought largely on the **PUBMED** electronic data base when applying the key terms: "knee osteoarthritis and falls", "knee osteoarthritis and falls risk/injury". As well, the **PubMed Central**, and **Google Scholar** data bases were reviewed for additional data. Articles published in the English language as full reports and pertinent to the current theme, with the exception of falls relative to older adults in general, and/or total knee joint replacement surgery prospective follow up studies were sought. Excluded were articles that did not discuss knee osteoarthritis per se, for example those that discussed falls and hip osteoarthritis, articles on the perception of possible falls, the fear of falling, or falls self-efficacy. Available data extending from January 1 2020-July 1, 2026 were carefully reviewed. Those articles of potential relevance and deemed pertinent in the author were downloaded and scrutinized further. The review material was then carefully examined and summarized and reported in narrative form, given the lack of any uniform focus or diagnostic descriptions in most studies. All forms of clinical study as well as review articles were deemed acceptable if they stressed the topic of falls risk factors in the context of definitive painful knee osteoarthritis, or if they highlighted the role of anxiety, falls fears, pain-anxiety, and recurrent falls in causing possible excess knee osteoarthritis damage. Post-surgical knee osteoarthritis falls studies were excluded, as were treatment proposals or partially completed studies. **PUBMED** was selected as the key electronic data source of information given its widespread data repository and effective

method of accessing relevant data. Readers seeking more historic perspectives are encouraged to refer to Zhang et al., Di Frattura et al., Tasci Bosbaz et al., Ng et al., Mat et al., Manlapaz et al. [6,14-18].

6. Key Findings

Although small in number it appears increasingly accepted that knee osteoarthritis is a topic of immense public health relevance, along with falls that may cause or be caused by this condition. Moreover, there appears to be a link between neuromuscular deficits, joint status, and kinematic alterations that perpetuates these deficits in multiple ways and to multiple degrees and can be linked to the presence of pain and pain related anxiety [13]. This is because in terms of falls alone, an age associated decline in postural stability due to muscle weakness and early pathological changes in the neuromuscular system may reduce locomotor efficacy and stability [13]. In the case of the presence of osteoarthritis knee joint damage this impact would generally be magnified, especially if mobility alterations and pain prevail [7,18,26,28]. In our view, even if the strength of the evidence is rated as "conflicting". by some many 2026 articles mention there is a linkage between muscle related disease factors and falls, including declines in muscle mass, flexibility, responsiveness or other motor attributes. The probable role of medical, physical and cognitive health status, as well as the possible role of environmental or neurological factors in perpetuating a possible knee osteoarthritis falls associations or their independent underpinnings, is mentioned, although less often.

In our view without solid evidence based justification it thus remains challenging to deliver or develop any sound predictive beneficial therapeutic model that could prove influential at all disease stages; as many published studies may not only be flawed, underpowered, and cross sectional, but questionable to aggregate or validate [6]. Many too exclude high age adults or those with highly salient clinically relevant health conditions such as neuropathies. Moreover, outcomes of the same variable or construct may not be comparable, for example body mass-high versus low or other possible key clinical factors may confound the ability to generalize [8,9]. Rosadi et al. however, felt their study showed that knee proprioception and joint range of motion are potential falls risk factors as these may tentatively fail to serve as an inherent protective mechanism against falls or any form of unanticipated or day to day joint impact [8]. This explanation has reasonable support and conceivably may well increase the rate of onset and progressive of knee joint damage, even in a healthy elder if it induces increasing gait, knee ligament damage, and postural instability [20]. In another study, where adults with knee osteoarthritis fell more often than those without knee osteoarthritis, the researchers demonstrated a relevant percentage of falls to be associated with the 'perception' of knee or gait instability-rather than actual knee joint imbalances or evidence of the knee giving way due to the presence of actual joint instability [21].

According to Iijima et al. who examined cases with sarcopenia-an age associated muscle mass and bone mass decline, those with a

knee osteoarthritis diagnosis tended to have a 4.17 times higher odds of incurring two or more falls than controls after adjustment for age, sex, and body mass index [22]. The increased recurrent falls experience was not clearly confirmed in participants with isolated sarcopenia and knee osteoarthritis, but a loss of muscle mass is likely to have an impact on balance and the generation of timely reflex response ability. Those with low bone mass may sustain macro or microinjuries that compound the impact of sarcopenic frailty signs. At the same time, as per van Schoor et al. older adults with knee osteoarthritis may be at an increased risk for recurrent falls that are mediated by excess pain medication usage, particularly the use of opioids [23]. In addition, a falls risk appears to be more likely in cases showing possible challenges in carrying out walking or trying to balance, being of an advanced age, female sex, with a lower body mass index, having gaze related visual problems and depression [24-27]. Structural tibial bone alignment deformities that may be inherent or progressively evident if knee ligaments are stretched or damaged, along with impaired joint stability can seemingly account for many recurrent falls in the elderly frail and others, including low back, knee, and foot pain sufferers [7,18,25,28,35,36].

Moreover, since the problems above tend to progress unabated regardless of underpinnings as identified by Harris et al. those in pain who fear moving can clearly be expected to experience recurrent falls more often than not, as may those who take narcotics and move incautiously, as well as those remain untreated [12,23,29-33]. The impact of pain linked sensory alterations, local disease associated neurosensory lesions, and anxiety and confusion are clearly additional falls risk predictors warranting attention even if somewhat disputed, overlooked in relevant points in some systematic reviews and fail to refer to cognitive attributes of associated dysfunction, poor stability and balance functions and level of pain and are hard to unravel because the muscle and cognitive elements alone that need to be examined are multilayered and diverse [7,18,31,33,38,39].

Ren et al. however, who have observed knee osteoarthritis subjects found they tend to exhibit a significantly lower step length, gait speed, and set of vertical ground reaction forces in both normal walking as well as during the first recovery step following a backward slip perturbation [40]. This indicated that falls as occurring among knee osteoarthritis cases could be precipitated by the combined presence of an inadequate degree of joint flexion and extension range of motion limitations due possible disease impacts such as swelling, inflammatory pain, immobility, movement fears, and the generation of suboptimal joint protective forces. Moreover, it appears older adults who already have a declining ability to respond effectively to obstacles in the environment or when encountered, or who fatigue readily when walking and exhibit movement pain, plus postural control and stability deficits may fall repeatedly [28,39-41].

In short, apparent clinically relevant interactive linkages between knee osteoarthritis and falls are clearly multiple, but remain complex to unravel temporally. At the same time, whether pain, pain-anxiety,

and medication intake are of import or not remains hard to discern with any clarity in the context of the older weakened adult with chronically painful knee osteoarthritis [13,24,37,39]. What is clear is that knee osteoarthritis, an important biomechanical disabler can foster an array of unwanted falls injuries and events among many older adults that may be perpetuated in the face of unrelenting pain and anxiety experiences. Their dual mitigation and prevention should thus be of high concern and one warranting urgent attention. Indeed, the challenges of knee osteoarthritis even in the face of a single fall are far reaching, including multiple mental health and economic challenges and ramifications. In either case, an increased risk of restrictive daily activities, pain catastrophizing, sarcopenia and excess muscle mass losses, falls fears plus a high chance of the elder becoming increasingly sedentary, as well as dependent and having to move into a nursing home within one year of an incident fall are highly probable adverse outcomes [42].

7. Discussion

Knee osteoarthritis, a progressively disabling joint disease that is increasing in prevalence despite years of study is a costly disease among older adults in all parts of the world. At the same time, the prevalence of falls among older populations and that can be attributed in part to knee osteoarthritis disease features is an unsolvable problem in its own right. In this regard, many have turned their attention towards teasing out the underpinnings of observed knee joint disease determinants as well as those that hasten its progression or drawing attention to aspects of falls often not well documented such as the role of 'long falls lies' the need for a more focused research and a more inclusive insightful clinical approach [42]. Others have sought to reveal the key importance of identifying remediable disease outcomes and pathogenic factors in general, and those related to falls risk. In this regard, a sizeable number of investigators tend to agree regarding the key factors that may predispose older knee osteoarthritis and raise the risk for falling and sustaining one or more additional injuries, as well as possible joint damage or worse knee osteoarthritis outcomes than anticipated even if no conclusive results prevail [11,43]. Yet it is concluded by most authors that evidence supports the view that falls are inextricably linked to knee osteoarthritis among other determinants. But fewer groups have sought to examine if falls, a major health issue in its own right, can lead to the onset of knee osteoarthritis, a possible hypothesis that cannot be ruled out. However, many papers currently imply some degree of relevance must be attributed to muscle as well as nerve associated pathways that affect gait. In addition, most researchers tend to agree that knee osteoarthritis and falls are potentially associated even if their underpinnings are not singular or well codified [44]. Moreover, even if it appears those with more severe disease may fall to the same degree as those with less joint damage, this is mostly true for radiological not the clinical disease features of knee osteoarthritis and suggests more be done earlier rather than later [43].

However, even when the data sources examined are known to be reputable, and give the impression that they house a reasonable number of statistically acceptable relevant papers on the present topic of interest, most do not appear to be based on any sound

theoretical framework, do not refer to the role of cognitions, behaviors, pain block injections, inflammation issues as far as reflex responses are concerned, or social factors such as food deserts and housing disadvantages. A high number either examine many possible isolated falls knee osteoarthritis correlates simultaneously, but not all, while others only examine a small number. Some data in systematic reviews are drawn from specific data repositories not primary sources, and their analyses may indeed employ data sets captured in the previous decades using surveys and medical charts that may not represent the entirety of the situation as this occurs globally in 2026, nor the objective reality of the time. It is also noteworthy that while COVID-19 greatly impacted the older adult, where many older adults health was impacted negatively, this sub group is generally not included in current knee osteoarthritis or falls investigative studies, but it can yet be seen that a fall incurred during the lockdown period clearly resulted in life changing modes of independence, considerable physical and emotional status declines, or even premature death.

Five years hence, it is safe to say the topic of falls in cases with knee osteoarthritis or its independent effects remain crucial issues to counteract and explore further. At the same time, what prevalence rates for knee osteoarthritis as well as falls, falling, and recurrent falls among the older adult population are should be clarified and a universal data collection method to this end adopted. Countering the high number of studies that continue to rely on subjective reports and measures that could be flawed is also vital, for example the frequency of falls incidents as recounted by older age adults often medicated or in pain where responses must rely on memory.

Other possible confounding factors that limit a uniform set of understandings and preventive guidelines in this regard are uncertain distinctions in osteoarthritis typologies, falls and disease duration and severity linkages, plus the role of prior surgery, overall health status, corticosteroid injections and others, and a trend to exclude a wide age range of study subjects and where pain data are collected via surveys or aggregated from chart reviews that are dated [45].

It is also confusing to unravel the above linkages to any meaningful extent because, it has been possible to argue that that osteoarthritis may actually be protective against falls and related fractures, especially if it is severe and induces less rather than more weight bearing activities due to pain-anxiety associated fears. However, if this is so, it is unclear why sarcopenia not commonly listed as an osteoarthritis falls risk factor is in fact a recognized falls risk attribute, or why a biopsychosocial model of inquiry is not followed generally and why joint replacement surgery does not obviate falls risk entirely [14,46,47].

This may be because a role for exaggerated distress experiences articulated by substantive numbers of osteoarthritis cases who experience severe or perpetual pain is not always equated or contemplated as being of functional relevance to any degree even though negative affectivity and pain-catastrophizing and/or kinesiophobia (fear of moving) clearly have the potential to

moderate or mediate joint damage and instability. In particular, while pain as well as anxiety may play an important role in shaping the disabling osteoarthritis experience in its various forms, its dual impact may have a strong bearing on both falls risk as well as their outcomes, including a negative impact on mobility as well as unsettling distressful pain experiences.

There is also evidence that a persistent preoccupation related to an incident fall, a term also called ‘fear of falling’ by some authors, is strongly related to the risk of falling and subsequent morbidity of falling, but little mention is made of the importance of pain mitigation to avert this linkage or to explain its key etiological underpinnings [35].

This may be because it is accepted that this report is a limited one and articles that are relevant were missed or are in process. It must be possible however to envision that an older adult who falls and sustains pain may become anxious and reduce their activities out of fear, even if this has longer term adverse falls as well as osteoarthritis implications. Moreover, the role of psychological and lifestyle factors on pain, plus the specific impact of one or more comorbid health conditions, plus obesity versus frailty is clearly relevant, but the magnitude of these factors remains hard to weight, uncover, validate, or substantiate, and may not be recognized especially if narcotics, hypnotics, psychoactive drugs and anxiolytics are the only forthcoming situational remedies. The presence of neuropathy, joint inflammation, fatigue, and health beliefs about falling are also understudied and hence often untreated despite their falls and osteoarthritis clinical and deterministic relevance. Other pain and recurrent falls determinants warranting study include

- Nutritional and health status factors [44,47,49].
- Drug dependency and usage [23]
- Environmental, lifestyle, and sleep factors [11,47].
- Specific knee osteoarthritis correlates, such as pain-location, intensity, pain-anxiety extent, postural sway, joint structural changes, static and dynamic balance, muscle endurance, contractures, stiffness, mass and force generation or modulation capacity [48,52,53,55].
- Psychological factors such as reactive versus trait anxiety [9,47,51,53,55].
- Falls fears and falls self-efficacy perceptions [38,41,46-50].
- Weight status [9,45].

To further advance this line of inquiry, we especially advocate for more intense bedside based efforts that attempt to: 1) differentiate high from low falls risk individuals; 2) the possible predictive impact of age, number of symptoms, and disease extent; 3) the possible presence of anxiety and pain catastrophizing.

A short screening tool used in the Emergency Setting that could help capture the related falls history, degree of daily pain, any fears of falling, plus medication usage, and knee osteoarthritis severity could help to guide other providers with salient data especially if housed in their electronic medical record. In the interim, Fu et al. advocate for greater emphasis on the need as well as the

importance of averting much suffering by applying timely targeted and equitable chronic care strategies to an elderly faller [57].

In this regard, decreasing any probable falls risk in general, as well as among vulnerable knee osteoarthritis cases in particular, is one approach we deem may yield considerable health savings as well as improvements in day to day active living abilities and life quality plus favorable longevity outcomes. What may work best here are more concerted well-funded widespread public health epidemiological oriented surveillance strategies, plus evidence based falls prevention programs, along with careful periodic evaluations of the vulnerable aging adult whether they have osteoarthritis or not.

In addition, examining and documenting the circumstances in which falls occur may provide for more targeted opportunities for clinical intervention and fall prevention strategies to emerge [11], as may treating remote pain as well as knee pain sources [50,56]. Indeed, a focus on minimizing pain is paramount, as unresolved pain may underpin the onset and perpetuation of those muscle deficits that appear to predate falls occurrences in functionally impaired older adults, especially those who are fearful of moving [58-60]. In the interim, to improve the chances of mitigating falls and their possible harm in older adults with knee osteoarthritis, or those susceptible to this condition, interventions to maximize muscle mass such as protein or amino acid and vitamin D supplementation to build muscle, efforts designed to strengthen the knee muscles and others, training to foster better postural and stress control, as well as efforts to allay pain, pain-anxiety, depression and falls fears associated with pain, and fears of movement are strongly indicated to avert a perpetual cycle of increased fall and injury risk, plus mobility limitations that further enhance falls and knee damage vulnerability [1,48,50,54,55].

Indicated as well are personalized fall prevention strategies, including vision and foot care, opioid, joint protection and falls education, balance, and gait reeducation [4,51,53,54,61-63]. To avert falls after knee joint replacement, therapy should be applied judiciously and address those with multisite pain symptoms, those who exhibit frailty, and those who are older with poor neural control [2,51,55,68,69].

Clinicians who are often involved in treating falls injuries as well as knee osteoarthritis fallers, can potentially reduce the degree of disability that can arise in either event by providing the older faller with a strong sense of support including:

- Emotional support as indicated, such as hope
- Instrumental support, such as a walking aid
- Informational support, such as a list of online falls prevention resources
- Appraisal/feedback support, such as praise or encouragement
- Help in arranging for the home bound patient to receive home physical therapy and possible behavioral and addiction counseling, weight management, podiatric and vision care
- Arranging for a home safety inspection and assistive device accessibility as indicated

The reason for undertaking this or a similar action plan is that one or more of the abovementioned forms of support if carefully construed and delivered empathetically would be expected to offer a protective factor that can buffer against stress and negative affect as well as day to day micro injuries and pain due to behavioral and physical as well as mental health factors that may lead to unplanned Emergency Department visits, while possibly enhancing pain and function self-efficacy [52,54]. As well, sleep quality, reductions in overall anxieties and psychological distress linked to recurrent falls may be mitigated [5,54]. Presumably in the severe case, this action plan along with possible personalized falls fears prevention efforts will prove of especially high import given that a present history of one or more falls within the year preceding surgery is found associated with increased 90-day complications and higher 1- and 2-year risks of adverse surgical outcomes and possible mortality [67,70].

To manage the high rate at which falls alone tend to occur among vulnerable elders, in addition to a program entitled STEAFI focusing on several themes as outlined above appears promising. Burry et al. further imply a possible role for assessing a role for any new sedative prescriptions filled within seven days after discharge that are often found associated with an increased hazard of a fall in the older adult, and a need for a possible Emergency Department visit, or hospital admission in some cases [71].

To achieve these promising goals what could be stressed are the following:

- Outpatient physical therapy access [possibly also within the Emergency Room setting].
- More focused first responder, as well as provider based education, workflow plans, and improved patient collaboration and communication efforts
- More prevalent efforts to raise public awareness of the importance of optimal health, home safety, selected medication risks, and the physical therapists' role in designing and implementing efficacious falls prevention efforts [63].

In this regard, Scalise et al. further propose GIS-based mapping of EMS data may help inform trauma center injury prevention planning so as to thereby identify communities where targeted outreach may preempt or reduce injury risk [71]. Outreach and patient counseling programs are also strongly indicated to mitigate postoperative falls and falls determinant risks and to decrease 90-day resource utilization in older knee joint surgical cases and to decrease 90-day resource utilization in knee osteoarthritis surgical patient populations [73]. A formal plan that is enacted towards fostering an integrated falls response service and need for multidisciplinary post-discharge interventions, focusing on pain management and psychological support and that encourages the active role of the individual to follow falls prevention and joint protection recommendations also warrants consideration in our view [73-75].

8. Conclusions

Despite the limitations of this report, it is clear knee osteoarthritis

and falls are immensely relevant older age debility attributes. Moreover, their mitigation in the older adult population in general, as well as in the knee osteoarthritis population, in particular, remains of high import as far as public health resource managers as well as planners in aging societies are concerned [72]. Indeed, even if the present narrative overview is not a systematic, critical or an expansive one, the immense importance of careful early assessment and follow up of the knee osteoarthritis faller cannot be easily ignored or disputed: Moreover, we conclude:

- i. Falls prevention is paramount in aging populations and regardless of knee osteoarthritis presence [72].
- ii. At the same time, the presence of fall induced or disease based severe pain and its bearing on movement abnormalities and anxieties appear of especially high import to consider in the realm of trauma and injury prevention.
- iii. The entire central and peripheral neurological systems, not only the skeletal system, may have an especially strong incremental, reactionary, and collective bearing and impact on joint attrition and falls risk unless identified and attenuated accordingly.
- iv. To advance this line of inquiry-the clinical prediction rule developed by Amano et al., along with the Comprehensive Geriatric Assessment tool and objective neuromuscular analogues of balance and Simplified Decision Tool may differentiate those at perceived risk for falling and what modes of intervention are indicated [63-66].
- v. It is also concluded that knee osteoarthritis cases should be screened for their falls risk periodically including pre surgically and made aware of their falls risk and their help should be sought in averting falls in the future rather than ignored even after surgery.
- vi. In planning to avert excess falls associated knee osteoarthritis disability, efforts to address the role of pain anxiety as this impacts knee extensor muscle weakness, muscle wasting, and deficient reflex responsiveness should not be neglected at any disease stage.
- vii. Access to community based falls preventive programs and others should be made equitable and of high quality for all who need these, especially the high [40%] percentage of those with a falls history undergoing surgery [56].
- viii. At the same time, Emergency Room personnel can make a great impact here in our view by initiating a prospective treatment plan for the older recurrent faller, especially among those with intractable pain, depression, anxiety, and a declining neuromuscular status history.

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