Crossing age boundaries; Falls clinic serves as frailty clinic beyond age category

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Introduction
As a person ages, they are subject to an increased risk of long-term medical conditions, falls, frailty, dementia, dependence and comorbidities [1]. Frailty itself is regarded as a chronic medical condition with potential progression [2]. Older adults with frailty conditions are more likely to be admitted to the Emergency Department [3,4]. One of the most common admission causes, especially in secondary care, is falls [5,6]. Falls are regarded as one of the earliest signs of frailty [7] and are one of the highest complications resulting in hospital admission [5,8].

A falls clinic can be used to screen older adult well-being and frailty in order to offer appropriate management at an earlier stage. In addition, it will provide a service to identify severe cases, such as those with syncope [9].

The activity of the Barking and Dagenham (B&D) Falls Clinic was assessed to evaluate the clinic as an appropriate venue to provide a comprehensive geriatric assessment. In this paper, the author provides detail of Barking and Dagenham Falls Clinic as a frailty clinic, beyond the age limit, providing medical and therapeutic intervention.

Methodology and service monitoring
B&D falls clinic is one session a week, consultant-led clinic with assistance from staff nurses. It also has service linked with community therapists. It uses a standardised falls assessment form which is based on NICE guidelines [10]. The main purpose of the clinic is to prevent falls rather than focusing on the symptoms or outcome of the falls. Standardised assessments have enabled clinicians at the clinic to provide specific causes of falls, enable appropriate intervention, and reduce variation in falls management.

The clinic accepts patients of various ages who have experienced a fall incidence referred by general practitioner. In addition, patients above 65 years of age admitted to general hospital [Barking, Havering and Redbridge NHS trust] after a fall incidence. Those admitted into hospital for other medical causes but experience in-patient falls will trigger a clinical incident report. The patient will be referred by the clinical team to one of the falls clinics. Exclusion criteria are cardiac syncope, neurological syncope, and pure environmental causes of falls, such as a trip over a pet or slippery curb.

The assessment form consists of the following:
- Cognitive assessment based on AMTS
- Falls caused by an acute medical condition (blood tests, urinalysis)
- Cardio-Vascular examination for Aortic Stenosis, carotid sinus disease and ECG
- Visual acuity and peripheral eyesight
- Motor examination of limbs
- Sensory examination of the periphery
- Assessment of Coordination and cerebellar diseases
- Bladder incontinence
- Get up and go test to assess muscular strength
- Gait assessment for balance
- Assessment fear and anxiety of falls
- Postural hypotension
- Review medications especially that of benzodiazepine, sedation, potential causes iatrogenic postural hypotension
- Osteoporosis assessment and vitamin D level
- Assess nutrition

Information was collected from clinic activities for full year of 2017 for analysis.

Results
A total of 139 patients visited the clinic. Patients were aged from 31 to 101 (average 78), with a gender distribution of 78 females and 61 males (Table 1).

Thirty percent of patients assessed were considered frail (Table 2). The entire patient received medication reconciliation and 15 cases started bone protection.

32 out of 139 (23%) patients were admitted into the hospital. Patients were followed up for six months after their last consultation. Ten out of the 32 admissions were due to falls (13.9%) and 5 of had severe post-fall outcomes (6.9%).

Six of the 139 patients (4.3%) passed away within three months of their last consultation. A further 11 patients died between three and twelve months of their follow-up.
Table 1. Frailty score, number and percentage of patients

| Level of frailty  | Edmonton | Rookwood |
|------------------|----------|----------|
| None             | [0-5] - 65 [46.7%] | [5] - 69 [49.6%] |
| Vulnerable       | [6-7] - 28 [20.1%] | [7] - 35 [25.1%] |
| Mild             | [8-9] - 27 | [5] - 14 |
| Moderate         | [9-11] - 10 | [6] - 8 |
| Severe           | (12-17) - 9 [13.9%] | [7] - 10 [13.9%] |

Table 2. Underlying conditions newly identified

| New condition diagnosis                  | No. | Referral to other specialties                  |
|------------------------------------------|-----|-----------------------------------------------|
| Cognitive impairment                     | 9   | All referred to a memory clinic               |
| Benign Essential Tremor                  | 3   |                                               |
| Idiopathic Parkinson’s                    | 4   | All referred for neurologist opinion after initial treatment |
| Peripheral sensory neuropathy             | 5   |                                               |
| Diabetic Myelopathy                       | 1   |                                               |
| Lacunar infarct                           | 1   |                                               |
| Cardiac collapse                          | 4   | Referred to cardiologist for intervention     |
| Autonomic Failure                         | 37  |                                               |
| Depression and anxiety                    | 6   | All referred to psychiatrist opinion          |
| Proximal muscle weakness and balance      | 36  | Required early therapists’ interventions      |
| Proximal muscle weakness and balance      |     |                                               |
| ankle deformity                           | 1   | Referred for orthopaedic opinion and intervention |
| L4/L5 stenosis                            | 1   | Referred for neurosurgeon opinion and intervention |
| Lumbar Radiculopathy                      | 1   |                                               |
| Alcohol                                   | 1   | Referred to alcohol anonymous service        |
| Morbid Obesity                            | 1   |                                               |
| Obstructive Sleep Apnoea                  | 1   | Referred for respiratory opinion             |

Overcoming challenges

This project faced three main challenges.

1. Cases may have been missed referral by general practitioners, community matrons or community physiotherapists, or clinicians at the secondary care.

2. Patients may have not attended the clinics for various reasons; most of the patients depend on their family members for transport to the clinic.

3. Finally, the pressure on B&D clinic operation may have occurred due to large number of referred cases.

In handling these challenges, providers at the clinic suggested ways to manage potential obstacles.

Regarding potentially non-referred cases to the clinic, a quasi non-blinded randomised clinical trial was conducted by the therapists at BHR over 6 months. This study identified some root causes of referral failure. A way to avoid this issue was to discuss all the falls cases in a multi-disciplinary meeting and suggest referral to the falls’ clinic. This referral procedure has become part of a strategic policy of BHR for all patients who experience a falls incidence.

For patients that do not attend the clinics, the clinic reached out to identify reasons why the patients did not attend, such as transport issues or forgotten appointments. A study has been conducted by the nurses of the B&D falls clinic over a three-month period, concluded to initiate automatic phone message reminders on the day of appointment, arranging hospital transport if necessary.

Case-load pressure on clinic operation was managed by having clear patient flow. Each patient received one follow up at three months after initial visit, i.e., two medical consultations for most of the patient and delegate jobs unrelated to falls to the GP. Current and projected case-load will be monitored and plan for another clinic session.

Conclusion

Falls are one of the earliest signs of frailty in all age groups. Falls clinics can act as frailty clinics where early frailty signs can be identified, providing patients with early medical, physical, and social intervention. With the increasing number of elderly patients who have a larger number of chronic diseases, there are thus a larger number of frailty conditions that need to be addressed earlier. Falls clinics can also act as a safety net identifying complications and referring cases appropriately for further opinion.

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