

# Frequent attenders in General Practice.

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## Introduction

In different Countries and different Healthcare Systems, GP workload is significantly burdened by a minority of patients seeing their GP a lot more often than their peers (1).

Those are patients are generally well-known to their family physician as subjects that make the "heart sink" and therefore were initially called by O'Dowd "heartsink patients" (2).

But when, more precisely, a patient "becomes" a high user or frequent attender "?

Even if the phenomenon is not new, we do not have data to define quantitatively this "entity" and we ignore if the prevalence of FAs as increased over time, or if it hasn't (3,4).

We do not have precise data about the average duration of their GP encounters, which could well differ from the standards 10 minutes, hence likewise affecting the burden on GP time.

To describe those patients, we still often reference to a work published in 1988. It is believed that Tom O'Dowd then coined the term "heartsink", to describe "The feeling experienced (by the family doctor) when their names (of patients) appear in the list of the morning appointments. " (1)

Further work has been done to define the reasons behind the frequent GP visits. In 1988, O'Dowd acknowledged that the medical experience was subjective, but perceived that the problem and its solution resided both in the patient.

A systematic review from Gill and Sharpe on prevalence, associations and clinical outcomes, and subsequent observations from other Authors, have shown that FAs have high rates of physical illnesses, psychiatric illnesses, social difficulties and emotional distress (3,5).

Frequent attendance in General Practice is also considered an indicator of behaviour of inappropriate use of other health services, in particular emergency departments and Secondary Care services (6,7,8).

Evidence of the effect of (mainly psychiatric) interventions on the rate of frequency and morbidity of

FAs have shown conflicting results (9,10). In a review of the interventions on FAs, it was found that

the high frequency can be a sign of a major depressive disorder and that its treatment can improve the depressive symptoms, but there is no evidence that it is thereby possible to influence the use of the services (11).

The interpretation of the studies on FAs is hampered by differences in Healthcare Systems and in the definition of FA (12).

It has been shown that age and sex are highly associated to the number of GP visits and that the identification of FAs without adjustment by age and sex leads predominantly to the selection of older women (13).

After reviewing the literature on high users, Vedsted suggested that the FA should be described as a subject that falls at the top 10% of the practice population stratified by age and gender (4).

Vedsted, suggested to arbitrarily fix a threshold in the distribution of the frequency of consultation, such that they are considered FAs all those who go above the percentage or percentile set as threshold.

However, this choice is associated with various problems of practicality with one key disadvantage that is of failing to identify a number of variabilities in relation Health Care System, for instances.

In this work, we checked the frequency GP encounters, both in office and at patient's domicile, over the course of 12 months, in both sexes, and in all age bands.

We then looked at the number of visits over the course of a year above which such number increases rapidly, isolating a limited group of patients to whom was associated an extremely high number of GP encounters.

Doing so, we aimed to clarify if and where the proportional threshold value and the absolute threshold value may converge.

We believe that they do converge and that this number can be identified as the most useful threshold value for the definition FA.

## Method

In the context of a General Practice medium density urban setting, we collected data on 9651 people registered with 4 different GPs.

Unlike most previous studies on FAs, we have not ruled out children and the most elderly.

In fact, several studies have only used data from patients aged 15 to 74 years.

For all patients registered during the 12 months prior to the audit date, we only counted the GP face to face consultations, either at the Surgery or at home of the patient. We have calculated the contact frequencies of all patients for each combination of age and gender. The top 5% of patients in terms of frequency of yearly encounters has been defined using the concept of proportional threshold.

## Results

The characteristics of the population studied is graphically represented in figure 1, they are the following:

Mother population: Patients currently registered

Last Search: 01-mar-2018

Relative Date: 01-Mar-2018

Population count: 9651

Males: 4540

Females: 5111

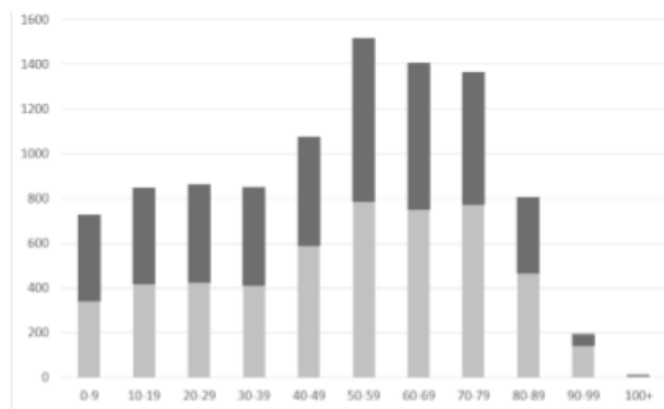


Figure 1 - Population of study: *Men/Female*

Of all enrolled patients, 20% did not consult their physician during the year of study, from March 1, 2017 to March 1, 2018.

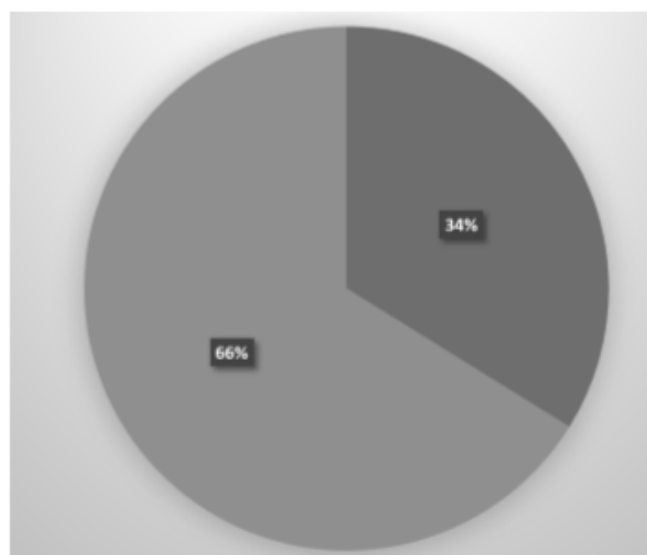
As a result, the general characteristics of the population who consulted their GP are the following:

Population Count: 7747

Males: 3321

Females: 4426

5% of the participants, or 399 patients, visited their family physician at least 15 times in a year. Among these, there were significantly more females than males (Figure 2).



*Figure 2 - Distribution of FAs per sex: Males/Females.*

As a whole, the female population was seen by GP 27157 times in a year and the male population 17032 times instead. The highest female FA was seen by the GP 51 times in 1 year, and male counterpart 37 times. The median, including patients that did not have any encounter with their GP over the course of the 12 months of study, has been of 5 visits for women and 4 visits for males.

The number of consultations per year seems to follow an exponential trend in both sexes (Figure 3).

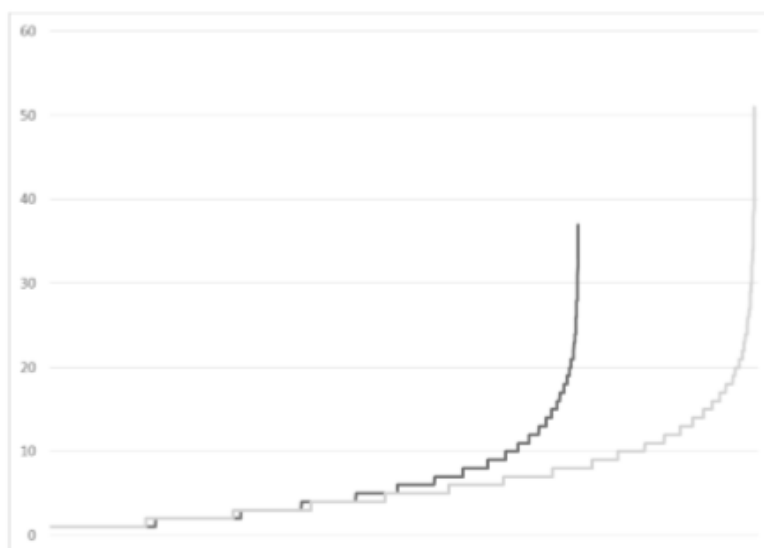


Figure 3 - Number of consultations per year per Patient: M and F.

The analysis of figure 3 clearly highlights how, after the 15 visits/year, the frequency of the visits starts to rise suddenly, and the number of patients above that threshold represents exactly 5% of the population studied.

When considering instead only the patients who have seen at least once their general practitioner, in the surgery, or at their domicile, the peak was 7 encounters for females (Figure 4).

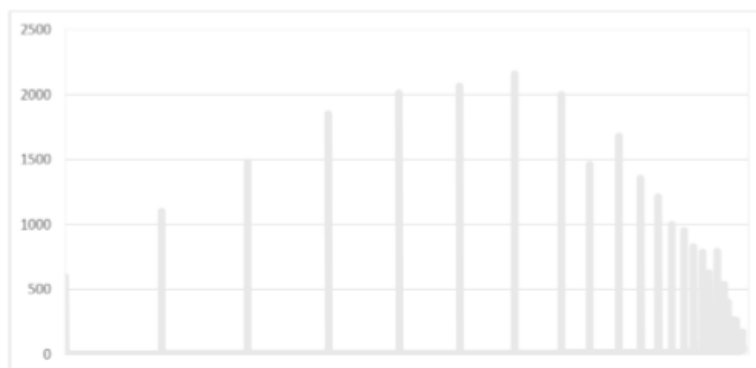


Figure 4 - GP visits distribution per female patient per year.

For the males, the peak was 6 encounters per year (Figure 5).

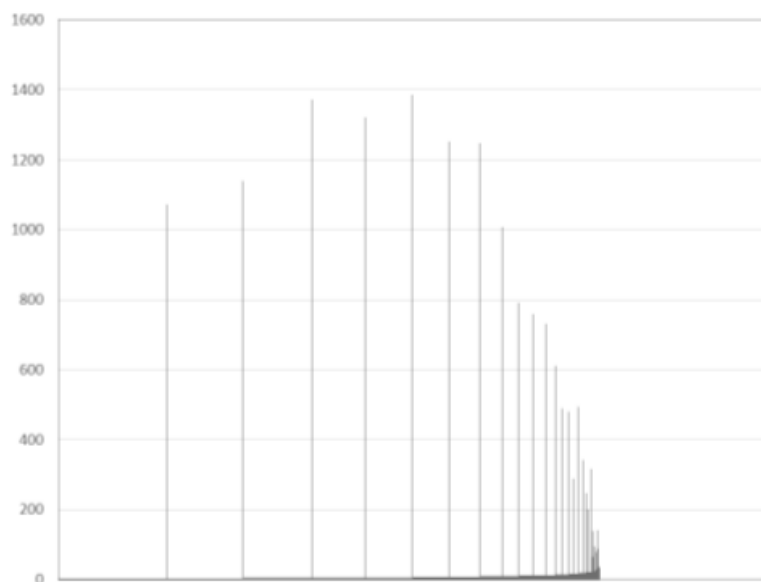


Figure 5 – GP annual visits in male population.

Advanced age correlates to a growing number of contacts for both sexes, but this trend is reduced over the range of 75 years of age.

## Discussion

The purpose of this study was the one to define FA, or HU, in general practice, establishing an absolute minimum number of consultations in a given period of time.

Our results show that a threshold of 15 encounters per year can represent a very useful value to that purpose.

In the past, several absolute thresholds have been suggested. In Italy, for example, the criterion of absolute reference number has ranged from 2 to 24 contacts per year. The majority of the studies set the threshold between 9 and 14 annual visits, the frequency of which GP in Italy would be unanimous in defining FA.

In our study, it emerges how only 5% of the practice population has seen their GP 15 times or more in 1 year.

In addition, the 15 GP encounters seem to match with a sudden and strong increase of visit requests, so to be a good candidate to threshold value.

Although the number of FAs accounts for only 5% of the GP practice population, it does demand a very significant GP working time.

It is possible, but it was not the subject of study on this occasion, that the encounters could last longer than average.

More specifically, the standard 10-minute encounter adopted by most GPs in the United Kingdom may not suffice to deal with FA needs. Moreover, we did not question whether and how often the FAs are clinically studied with blood tests and imaging, or subject to referral to Secondary Care, compared to their peers.

Our results, contrary to previous work on the subject, do not suggest the need for greater specificity and sensitivity for the identification of the FA using smaller groups, dividing all patients into age-by-sex cohorts.

Unlike other studies, we have not excluded from the audit the subjects over 75 years and paediatric patients.

Interestingly, the prevalence FAs seems to diminish rather than increase in the very senior group compared to the group of 60-75 years throwing doubts about the linear relationship between fragility and medical complexity with the number of GP encounters, but also on the social reasons unleashing frequent GP attendances.

It is unlikely that the financial impact of FAs on the budget of the NHS is negligible.

Based on the cost ratio of sanitary and social units 2017 of the PSSRU at the University of Kent, the cost of a Single Surgery Encounter with the GP is estimated be £38.00 (\euro 43.37; \$53.55). The cost is higher for the Home Visit and it increased further by the cost of prescription, by the administrative costs, and the costs of the requests for specialist visits.

Therefore, since the average number of encounters per year per patient is 0.8, with some variability by age and gender range, and taking into account the fact that about 1/5 of the population of practice does not consult the GP during the entire 12-month period, the additional financial burden arising from FAs will start from a minimum of £555.00/year (\euro633.43; \$782.18) per FA.

By extending this calculation to 5% of the UK population, the minimum additional expenditure The British National Healthcare System that can be attributed to FAs is £1.82 billion (\euro2.05 billion/\$ 2.54 billion).

The magnitude of this figure, combined with the scarcity of human resources and recruitment problems in General Practice in the UK, is such that it would seem to urge to manage more effectively FAs. Their timely identification would therefore be an important starting point.

## Conclusion

We conclude that the use of a numerical threshold to define the assiduous GP goer is feasible and useful in order to design more convenient strategies to manage the clinical management of FAs. We propose that is reasonable set the number to 15 appointments per year per patient.

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