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Consulting Patterns of Children at a General Practice During the Coronavirus Pandemic

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Abstract

Aim

We sought to measure the change in the use of the general practitioner (GP) service by paediatric patients of our group practice, following the introduction of pandemic restrictions in March 2020. We aimed to determine the causes for the observed reduced consulting frequency and whether telephone advice is acceptable to parents as an alternative to face-to-face consultation.

Methods

We interrogated the electronic medical record for a count of surgery and out of hours (OOH) contacts between January 2019 and June 2020. We interviewed 10 parents of children under six years of age as to their reasons for consulting or not at this time. This informed an on-line survey of 108 parents.

Results

Consulting frequency fell by three quarters from an average of 12 visits/day to 3. OOH visits also declined from an average of 3 to 1/day. Telephone contacts with the GP did not increase.

Parents gave a number of reasons for not consulting: absence of illness (90%, 62/69), fear of coronavirus infection (28%,19/69), wishing to protect the front-line service (21%,14/68) availability of a parent to monitor a sick child (20%,13/66)

Many parents (73%, 74/102) wished to continue to avail of telephone triage following the ending of pandemic restrictions.

Conclusion

Much of the consulting of children at our surgery relates to infective illness. Telephone triage for children with minor illness is welcomed by parents.

Introduction

In our group medical practice, we noticed a marked decline in paediatric consulting coincident with the institution of the delay phase of the response to the coronavirus pandemic in mid-March 2020.[1]

Children with eligibility for free general practitioner (GP) care, under six years of age, consult more frequently than fee-paying children.[2,3] They attend more often, both during surgery hours and in the out of hours (OOH) service, since the removal of out of pocket payments in 2015, with an increase of 9% and 20% respectively in one study.[4] The Growing Up in Ireland study measured a 25% increase use of the GP service where children gained medical card or doctor visit card eligibility.[5] It is known that out of pocket costs are a barrier to the use of GP services and that access probably predicts better long term outcomes[5] On the other hand greater access and use of the GP service has implications for cost to the State and for workload planning[3,4,6,7]

A sudden change in demand for children's appointments was of interest as we felt it might inform our approach to providing care in the future. We wished to know whether the pandemic related reduced attendance was part of a public response to a unique population health crisis or the result of a true decrease in need relating to incident illness.

We therefore sought to document the change in consulting during the pandemic and to identify what factors contributed to consulting decisions. We also aimed to determine whether the enforced move to remote consulting by telephone due to Covid-19, might be acceptable as a lasting alternative to in-person consulting with children.

Methods

Bedford Medical Centre is a group general practice serving a mixed urban and rural population in Navan, Co. Meath. Nine GPs and five nurses serve a population of 18,000 patients of whom 7,400 are eligible for free care under Ireland's General Medical Services (GMS) scheme. There are 1009 eligible children aged less than six years.

The practice electronic medical record (*Health.one™, Clanwilliam Health Ltd.)* was interrogated to provide a daily count of all consultations with the GPs as well as all out of hours (OOH) visits for individuals aged less than 6 years, between January 1st, 2019 and June 1st, 2020. Nurse visits, such as for immunisations, were excluded. Consultations by telephone were also counted separately over this interval. The database was searched on July 1st, 2020.

Telephone interviews were conducted by two authors (DM and NM) with a purposeful sample of ten parents of an under six-year-old child, reflecting family size and previous consulting frequency. A table was generated of all children who had consulted along with the number of their consultations over the preceding year. The files of children with high, median and low consulting frequency were reviewed and a list of of patients was created by selecting equally from each frequency as well as single and multiple children families at each frequency.

The selection was not random, and the interviewers contacted parents of these children in batches. Interviews were recorded and reviewed by both authors and agreement was reached as to emergent themes, all of which were apparent by the tenth interview.

This analysis provided the basis for an 11-item online questionnaire (*Surveymonkey®*). Questionnaire items were GP usually attended, family composition, parental employment status, child minding arrangements, whether and where child had consulted since pandemic, reasons for not consulting, experience of telephone consulting and future consulting choices.

We contacted the parents of all 280 under sixes, who had permission to use their mobile phone number documented in their file. One parent of each of these children was sent a text message informing them of the survey. They were invited to access the survey through a link in a second text message. Ninety-eight parents responded initially with a further ten responding to a single reminder text message. Responses were anonymous. Simple descriptive statistics were used to analyse responses.

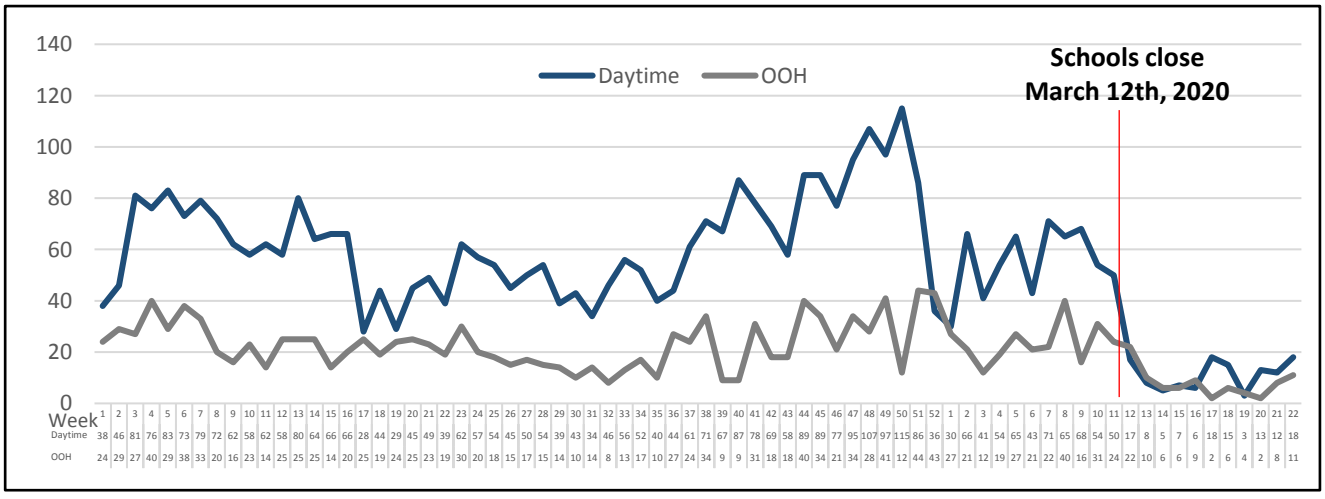
The study was undertaken as part of a quality improvement initiative around the care of children at the practice and was deemed not to require review by a research ethics committee according to Medical Council guidance.[8]

Results

Consulting patterns

The weekly number of consultations in person, at the surgery and OOH is reported in figure 1. The mean number of surgery consultations per day dropped from 12 in February to three in April with the lower rate reached within a fortnight of March 12th. Consultations at the OOH service declined from three to one per day in the same interval. Telephone consultations with GPs at the surgery in relation to these children did not rise as face-to-face visits fell, with a mean number of three and two recorded per day in the month before and after March 12th, 2020 respectively.

Fig. 1: No. of consultations each week by children <6 y.o. in daytime and OOH service (Jan 2019-Jun 2020).



Survey of parents

The response rate to the online survey was 39% (108/280). Households were described as having two parents (94%) with one (21%), two (48%) and three (21%) children. In a majority of families, all parents worked (64%) In 36% one parent was at home. Thirty percent of parents reported having attended the surgery since the pandemic lockdown and a further 3% had attended the OOH service.

Parents of the 73 children who had not visited the surgery or OOH service recently were asked to indicate their reasons: 90% (62/69) stated that the main reason was that their child had not been unwell; 28% (19/69) that a main or partial reason was concern that they could contract or transmit coronavirus ; 20% (13/66) that because they were on furlough at home they could monitor a child's illness without seeing the GP and 19% (14/68) that they wished to spare the GP as a front-line service. The reasons given did not differ between families where one parent was at home before the pandemic and those where all parents were at work, X^2 (1,N=73)= 0.59, p=0.89.

Twenty four percent of parents (28) had availed of a telephone consultation since the pandemic: with the GP at the surgery (23/28) with the Practice Nurse (1/28) and with the out of hours GP or Nurse (4/28.)

When parents were asked how they would act in case of a child becoming sick, 6 (5%) stated they would avoid seeing the GP and 57 (58%) that they would telephone for advice before attending. A majority of respondents (73%, 74/102) favoured the continued option of telephone consultation once the pandemic restrictions ended.

Discussion

The extension of free GP care to the whole population commenced in 2015 with provision of free-at-the-point-of-access care to children under six. It is expected that this will be expanded by degrees under the national blueprint for health policy, *Sláintecare.*[9]

The predictable increase in use of the GP service following removal of financial barriers, has generated increased workload in the daytime surgery as well as out of hours.[4]

Our results show a marked reduction in consulting frequency at the onset of the pandemic crisis. This not confined to the daytime practice or to our clinic alone, as attested by the fact that the OOH contacts for children across the Northeast region numbered 2113 in April 2019 compared to 622 in April 2020. (A Fitzsimons, Manager NEDOC Ltd, personal communication.)

In our interviews with parents and subsequent survey, the absence of illness among children was the most important reason advanced for not consulting since the start of the pandemic.

Consulting fell to a level of one to two surgery visits daily over twelve days from the announcement of school closure. This would be consistent with the incubation of most childhood viral illnesses.[10]

In-person consultations were not replaced by an increase in the number of telephone consultations tends to confirm a reduction in incident illness.

The use of the telephone or video consultation has become widespread as a result of the coronavirus pandemic. Respondents in this survey want a continued telephone option after the crisis and a majority stated that they would seek to have a telephone consultation as a first step if their child became ill.

Our results are limited to an approximate ten percent sample of children in a single practice and may be especially subject to selection, response and acquiescence biases. Our survey included only 73 children who had not consulted during the pandemic and they may have been a healthy cohort in any event. On the other hand, in our telephone interviews and survey, there was a consistency in the findings that (a) decisions not to consult were mostly because children were not sick and (b) that the telephone consultation was a welcome alternative. This consistency may lend some plausibility to our results.

Consulting among children, as for adults has a number of drivers other than illness but is determined by parents rather than the patient themselves. Nolan and Layte have shown that besides health need, eligibility for care, free at the point of access and maternal self-reported health determine the consulting rate of Irish children.[5] In this cohort, eligibility was not a barrier. We did not study maternal health. We hypothesised that the increased availability of parental supervision of their sick children due to pandemic restrictions on work might have reduced consulting. A fifth of parents gave this reason for not having consulted but there was no difference between households with one stay-at-home parent and those with both parents at work in the response to this question.

If minor childhood illnesses, usually infections, are the greatest driver of paediatric consulting, are there better ways to deliver the necessary reassurance once children are again contracting viral illness?

Our practice during the pandemic and the preferences of parents suggests that the telephone might supply some of this need. However, while this is safe, it has not been shown to reduce consulting time or costs, rather redistributing work without reducing clinician consulting time.[11] The substitution of the nurse or nurse practitioner is another solution to GP workload pressure but about which we did not enquire. This is also safe and does reduce physician workload and may reduce overall service costs.[12]

We conclude that in our practice, a large part of the daily paediatric workload reflects incident infective illness and is therefore likely to rebound when social isolation is relaxed. Telephone consulting would be acceptable to many parents in response.

That demand for GP services in daytime and OOH could be moderated in the longer term, by ongoing attention among children to the sort of hygiene measures seen during the coronavirus pandemic, is a prospect raised by these results and which might warrant further investigation.

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Declaration of Conflicts of Interest:
The authors declare that they have no conflict of interest.

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