

Analysis of Out of Hours Telephone Consultation at the Medical Reception Station Sennelager, British Forces Germany

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SUMMARY: The advent of 'NHS Direct', has centred attention on nurses giving telephone advice as part of the provision of out of hours medical care. A three month retrospective study of telephone consultations by nurses at the MRS Sennelager showed that telephone consultation greatly contributes to "out of hours" medical care. The outcome of telephone consultations made out of hours revealed that in 70% of telephone calls the advice given enables the patient to stay at home. Twenty eight percent of patient contact out of hours was by telephone.

Introduction

NHS Experience

General Practitioners in UK provide medical cover for their patients 24 hours per day. Over the last 20 years patient expectations have resulted in a considerable increase in workload out of normal working hours (1). This has been recognised by the Government and was addressed in the recent White Paper on the NHS (2). In this paper the Government announced its intention to set up NHS Direct.

NHS Direct is a nurse run, telephone triage service, that has been set up in 3 pilot NHS regions. Patients phone a locally charged telephone number and receive medical advice from a trained nurse. The nurse has available computer generated protocols. The advice may involve self-treatment at home, advice to seek emergency medical care, advice to attend the nearest Accident and Emergency Department, or advice to see their General Practitioner. The Government hopes that NHS Direct will provide patients with health advice that will not only improve patient care but also "persuade patients to seek less resource-intensive medical care." It is hoped that this will reduce the workload of General Practitioners out of hours.

An initial report (3) into NHS Direct describes a huge uptake by patients with 35000 telephone calls in the first 6 months of its inception. Most telephone calls to NHS Direct take place at the weekend. Sixty percent of the calls take place between 1600 hrs and 0800 hrs. It is not clear if the demands on General Practitioners "out of hours" have been reduced. However the early success of NHS Direct (in terms of uptake by patients), resulted in the Minister for Health announcing (4) an input of cash to speed up the extension of NHS Direct to cover 60% of the country as soon as possible. A national service is planned to be in place by the end of 2000 (5).

Background

In British Forces Germany out of hours medical cover is provided from a Medical Reception Station (MRS) or Garrison Medical Centre, by a duty practice nurse. The nurse provides telephone advice and is supported by an "On Call" duty medical officer. This model is similar to NHS Direct. The duty

nurse has protocols to follow for the treatment of the most common presenting conditions. This system has been in use for many years.

MRS Sennelager provides out of hours medical cover to the population of Paderborn Garrison. The population is about 10,000 consisting of military personnel, their dependants and attached civilian staff. The population is that of a typical military community with a high proportion of children and young adults. The Garrison is spread over an area of 30 square kilometres and includes the quartering area of Detmold. The Duty Medical Officer is responsible for providing emergency medical cover and can refer patients to the local German hospital.

Nurses working in the MRS come from a wide variety of clinical backgrounds. There is a high turnover of staff. New nurses are given a 2-week orientation programme, which includes telephone triage. At present there are no formal training objectives relating to telephone triage. Nurses typically observe colleagues taking calls until confident to handle calls on their own. Clinical Guidelines are available but have been constructed without necessarily considering their use in giving advice on the telephone.

All telephone calls are recorded in an Occurrence Book. While most calls are recorded it is accepted that a few calls may not be logged. Details recorded for each call, include name of caller, age, unit, rank/status, brief outline of problem and outline of advice given to caller.

Objectives

The advent of NHS Direct has focused attention on telephone advice given by nurses working in Primary Care. The aim of this study was to quantify the telephone advice given by the duty nurse. This information had not previously been evaluated. It was hoped that this information would contribute in assessing the training needs of MRS Sennelager nurses. No attempt was made in this study to assess the quality of the advice given but some attempt was made to assess the outcome of the call. It also was hoped that a comparison could be made between the out of hours service at MRS Sennelager and other ongoing initiatives in the United Kingdom.

Method

A retrospective study was carried out using the MRS Sennelager Daily Occurrence Book for the months of July 1997, November 1997, and May 1998. These months were selected as the majority of the soldiers were in station. All out of hours calls were subdivided according to main presenting symptom. The outcome of the advice was recorded. Patients were classified as children if they were under 16 years of age.

Out of Hours in Paderborn Garrison is as follows:

Weekdays 1630 - 0800

Weekend 1630 Friday - 0800 Monday

Results

The Occurrence book was studied to ascertain the number and nature of the telephone call. The total number of telephone calls recorded for the three months was 596 out of 2088 patient contacts "out of hours". In the study months there were 205, 146 and 245 telephone calls. Taking the Garrison population into account this can be expressed as patient contacts per 1000 of the population. In the study period there were 59.6 telephone calls per 1000 of the population studied. Twenty eight percent of patient contact was by the telephone (Fig 1).

Of the 596 calls, 279 (47%) related to children (under 16). While 27.5% of the Garrison population are children, 47% of telephone calls relate to this age group (Fig 2).

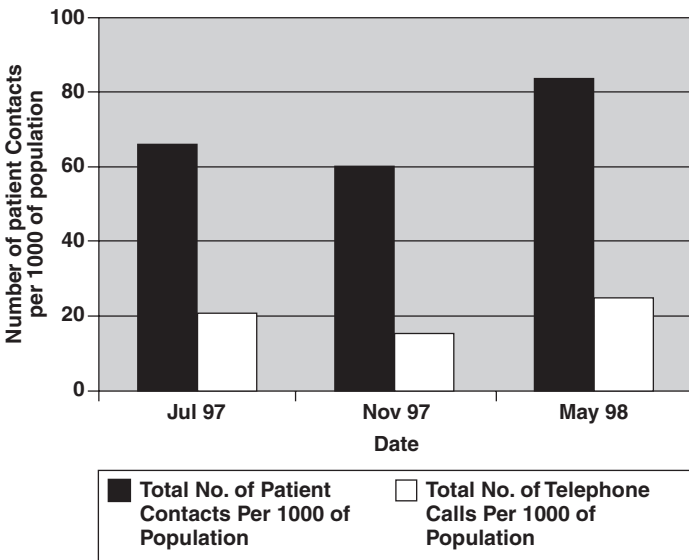


Fig 1. Patient Contact at MRS Sennelager Out of Hours

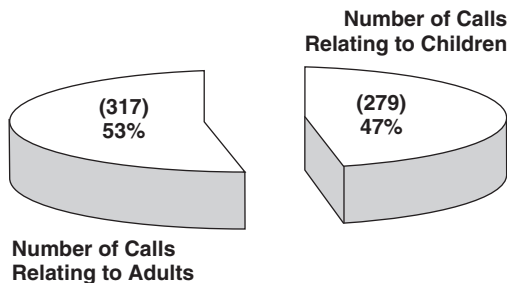


Fig 2. Age of Patient

Of particular interest is the number of telephone calls that resulted in "advice only" being given (Fig 3). Out of the 596 calls, 415 (70%) resulted in advice only, while 135 (23%) advised attendance at the MRS. It is not known how many repeat calls were made. In 70% of telephone calls the nurse advised a management option that results in the patient being able to stay at home. This would suggest that nurse telephone

advice significantly reduces out of hours attendance at MRS Sennelager.

In telephone calls relating to children (Fig 4), the commonest symptom reported was of "diarrhoea and vomiting" (22%). In adults (Fig 5) clerical advice (appointments, transport requests, information concerning hospital admissions) was the commonest reason for the telephone call.

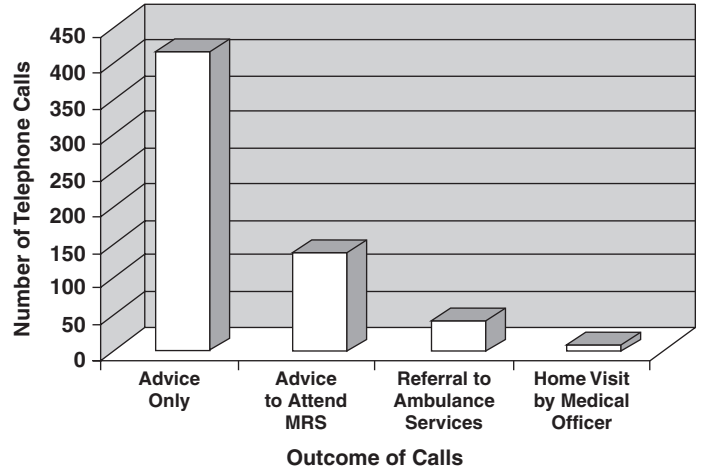


Fig 3. Outcome of Telephone Calls

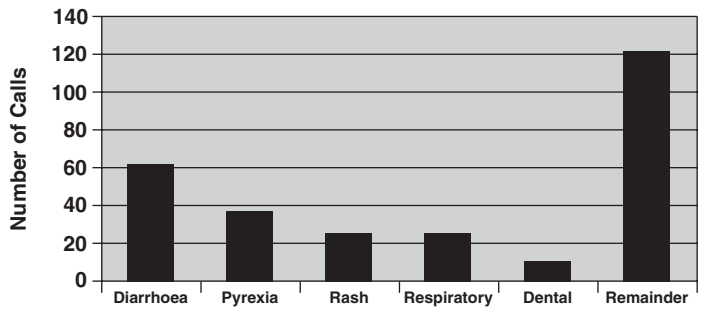


Fig 4. Symptoms Reported on Telephone (Children)

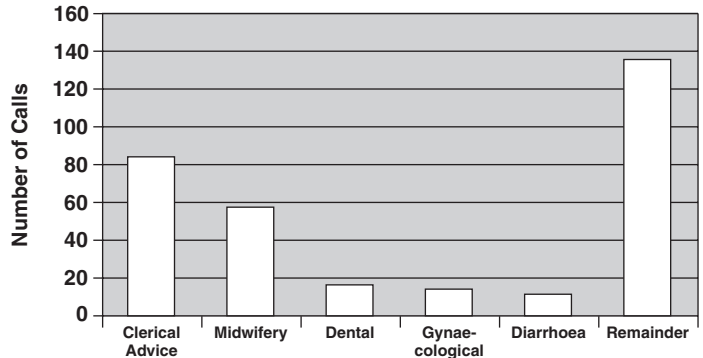


Fig 5. Symptoms Reported on Telephone (Adults)

Discussion

Outcome of Calls

In a recent study of telephone triage (6) undertaken by nurses for an out of hours service with 120 GPs in West London, nurses gave "advice only" in 38% of cases. In a recent larger study (7), involving a population of 97,000 patients in Wiltshire, with 14,492 calls over a year, 50% of calls were managed by a trained nurse without referral to a GP. In our study 70% of calls resulted in advice only. This higher result may be attributable to the number of "administration calls" (requesting appointments, booking transport and enquiries about clinic times). This was 84 calls (26% of all adult calls).

Comparing the results of this study with the findings from

monitoring the first six months of NHS Direct is also of interest. In NHS Direct 70% of calls are triaged by the nurse. This is the same percentage as found in our study.

The ambulance call out rate seems higher than recent UK studies. The West London study recorded only 1.1% of calls requiring a 999 service. The MRS ambulance call out rate of 7% may reflect the use of the MRS as the principal method of obtaining patient transport. Patients are encouraged to contact the MRS for all emergencies. Language problems may also play a part, with only a minority of patients speaking German and thus preferring to contact an English speaking nurse at the MRS, rather than a German speaking telephone operator. Since the demise of the military ambulance in BFG, there has been a greater use of German ambulances for patient transport.

The number of home visits is extremely low at less than 1%. This may reflect the nature of the population: young fit and mobile. The Duty Nurse is able to arrange transport if required. Home visits are still undertaken if the Duty Medical Officer considers it appropriate.

Nature of Telephone Calls

It appears that paediatric telephone calls reflect those of other studies where only a few presenting symptoms dominate the spectrum of calls. Symptoms of diarrhoea and vomiting, rashes, respiratory problems and pyrexia accounted for 57% of all paediatric calls.

Adults complained of a wider variety of symptoms. The large numbers of "clerical" or "administration" calls (25% of adult calls) were unexpected. These calls included requests for transport for other agencies and requests for information regarding in-patients in hospital. Receptionists only cover the MRS during office hours. The large number of administrative calls might reflect a difficulty of telephone access during the normal working day or perhaps the shift work pattern of our patients.

The Garrison Population is made up of 27.5% patients under 16 years of age. However some 47% of calls to the MRS "out

of hours", concern this age group. Telephone advice concerning children represents a special group and Practice Nurses must be trained specifically for this. Protocols must reflect telephone advice concerning children.

Conclusion

Telephone consultations form a considerable workload for MRS Sennelager nurses out of hours. Twenty eight percent of patient contact, out of hours, is by telephone. In 70% of calls the nurse gives "advice only", aiding the patient to be treated at home without seeing the Duty Medical Officer out of hours. At present the nurses receive little formal training in giving telephone advice. This needs to be included in both their orientation programme and in-service education. The particular needs of giving telephone advice regarding children, needs to be an integral part of the training.

This study demonstrates similar findings to that of the NHS Direct experience. In the majority of telephone calls the advice given enables the patient to self manage their medical complaint at home.

References

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