

Does a telephone service provided by experienced GPs outside office hours improve elderly care?

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WE WANTED ANSWERS TO THREE QUESTIONS

1. Do telephone consultations by experienced GPs reduce the need for emergency care visits outside office hours in elderly care?
2. How often do the GPs make correct decisions in these consultations?
3. Do elderly-care nurses and consulting GPs consider these consultations useful?

BACKGROUND

In Eastern Finland, ESSOTE provides integrated primary health care, special health care and social services for a population of 102,500 (12.5% aged over 75 yrs). Decreasing inpatient capacity has resulted in a need to increase the medical support provided by elderly-care staff.

Acute exacerbations of chronic conditions or new diseases may cause rapid deterioration of general condition, resulting in emergency clinic visits and hospitalisations. Outside office hours, elderly-care staff call busy emergency clinics for advice. The threshold for a telephone consultation is high and the clinics' expertise in elderly care varies.

WHAT DID WE DO?

Five experienced GPs (7+ years of experience in elderly care) were hired to provide a telephone service (weekdays 4-10pm, weekends and holidays 9am-10pm). The doctors answered consultation calls from home care, assisted sheltered housing, service guidance and primary health care wards. Consultations were based on the ISBAR model.

The GPs worked at home, they had laptops and access to electronic patient records. Some consulting units could measure CRP and ECG recording at the bedside to support the decision-making. The GPs could refer the clients to the emergency clinic, primary care ward or hospital-at-home. They could also prescribe peroral or intravenous medication.

WE GATHERED THE DATA IN THREE DIFFERENT WAY:

1. The GPs completed a structured monitoring form (N=388).
2. We analysed 97 cases concerning deterioration of general condition via the electronic patient records.
3. The GPs (N=5) and nurses (N=68) completed a questionnaire asking the usefulness of the telephone consultations.

The analysis covered the doctor's ability to identify patients needing emergency treatment, the effectiveness of instructions provided and whether an emergency clinic visit was prevented.

RESULTS

About half of the consultations came from sheltered housing and one fifth from primary care wards. Only one tenth of the cases came from home care (see Figure 1).

The characteristics of the study population are shown in Table 1. The most common reasons for consultation were symptoms of acute infection, cardiac problems and neurologic symptoms. The other reasons for consultations included abdominal and urinary tract symptoms, palliative care, fatigue, musculoskeletal pains etc

- Of all the cases, 88% and of study group 77% could be treated without referral to the emergency clinic (see Figure 2).
- The GPs could identify the need for emergency care well (sensitivity 86%, specificity 97%).
- The analysis of the outcomes after one month showed that 61% of the consultations were beneficial, 37% neutral and 2% harmful. We estimated that consultations reduced the need for emergency visits by 69%.

- Furthermore, it seemed that in particular, those patients with acute infections or cardiorespiratory/neurologic symptoms gained added value in two-thirds of the cases (see Table 2).
- The nurses and GPs considered the telephone service very useful (see Table 3).

THE NURSES COMMENTED ON THE TELEPHONE SERVICE AS FOLLOWS:

"Ten points to the very professional GPs who are always ready to help."
"Excellent arrangement, we get always support with our work. Our clients are safely treated without referral to emergency care in most cases."
"Why can't we have this service in office-hours?"

ANSWERS TO THE QUESTIONS

1. Telephone consultations by experienced GPs reduced (69%) the need for referrals to emergency care remarkably in elderly care during out-of-office hours.
2. An experienced GP is able to refer patients correctly to emergency care in 86% of cases and identify those who don't need referrals in 97% of cases by phone. Our study suggests that symptoms of acute infection, and cardiorespiratory and neurologic symptoms can be assessed correctly by phone consultation in two thirds of cases.
3. The elderly-care nurses and consulting GPs felt that the telephone consultation service was very useful.

FIGURE 1. WHERE DID THE CONSULTATIONS COME FROM (N=388) ?

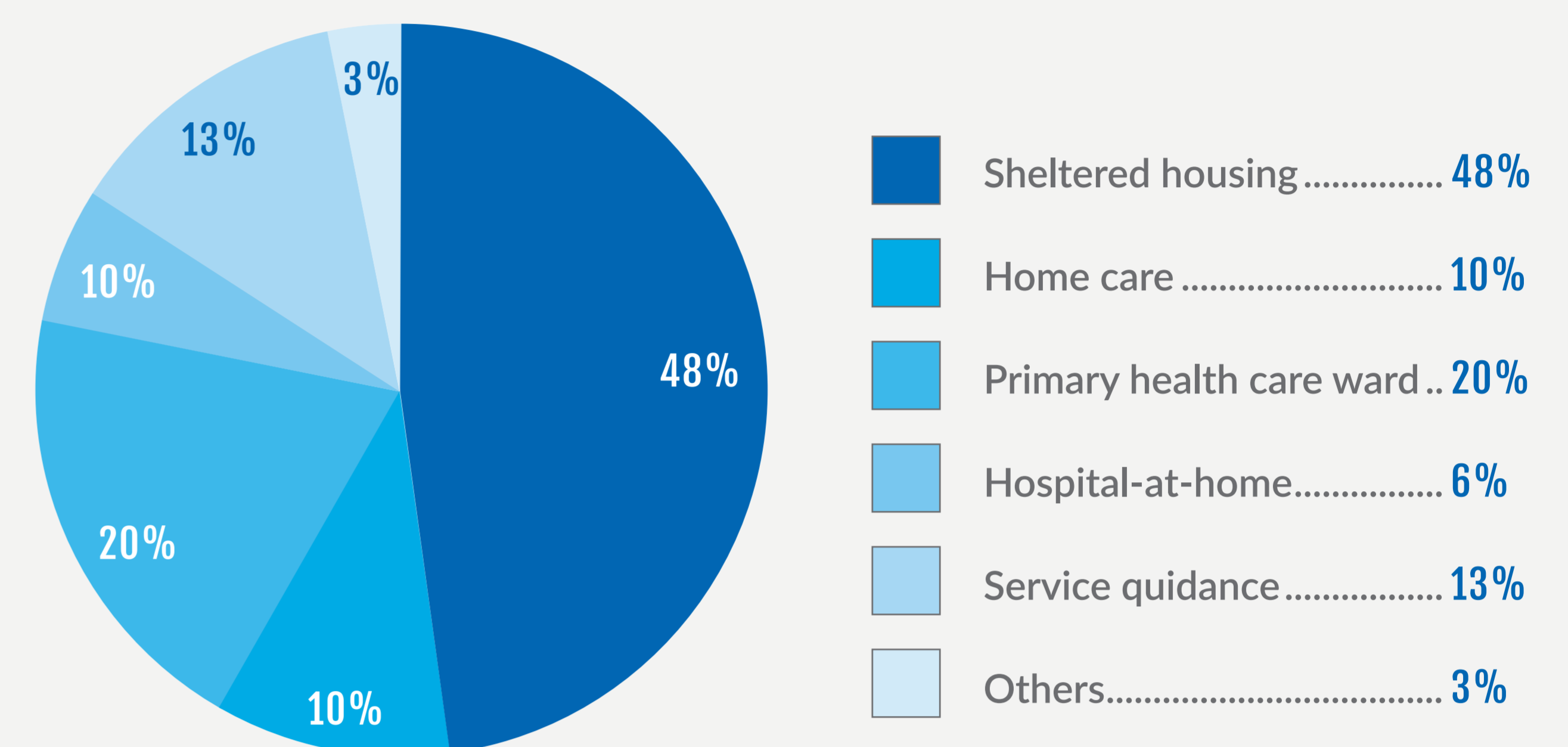


TABLE 1. CHARACTERISTICS OF THE STUDY POPULATION

NUMBER OF CONSULTATIONS	97
mean age of the elderly (range)	83 (55-98) yrs
females (%)	57 (58%)
REASON FOR CONSULTATION	
acute infection	28%
cardiac symptoms	19%
neurologic symptoms	23%
other symptoms	31%
STATUS OF THE ELDERLY	
living at home	14%
living in sheltered care	63%
Inpatient (primary health care)	23%

FIGURE 2. OUTCOME OF THE STUDY CONSULTATIONS N=97

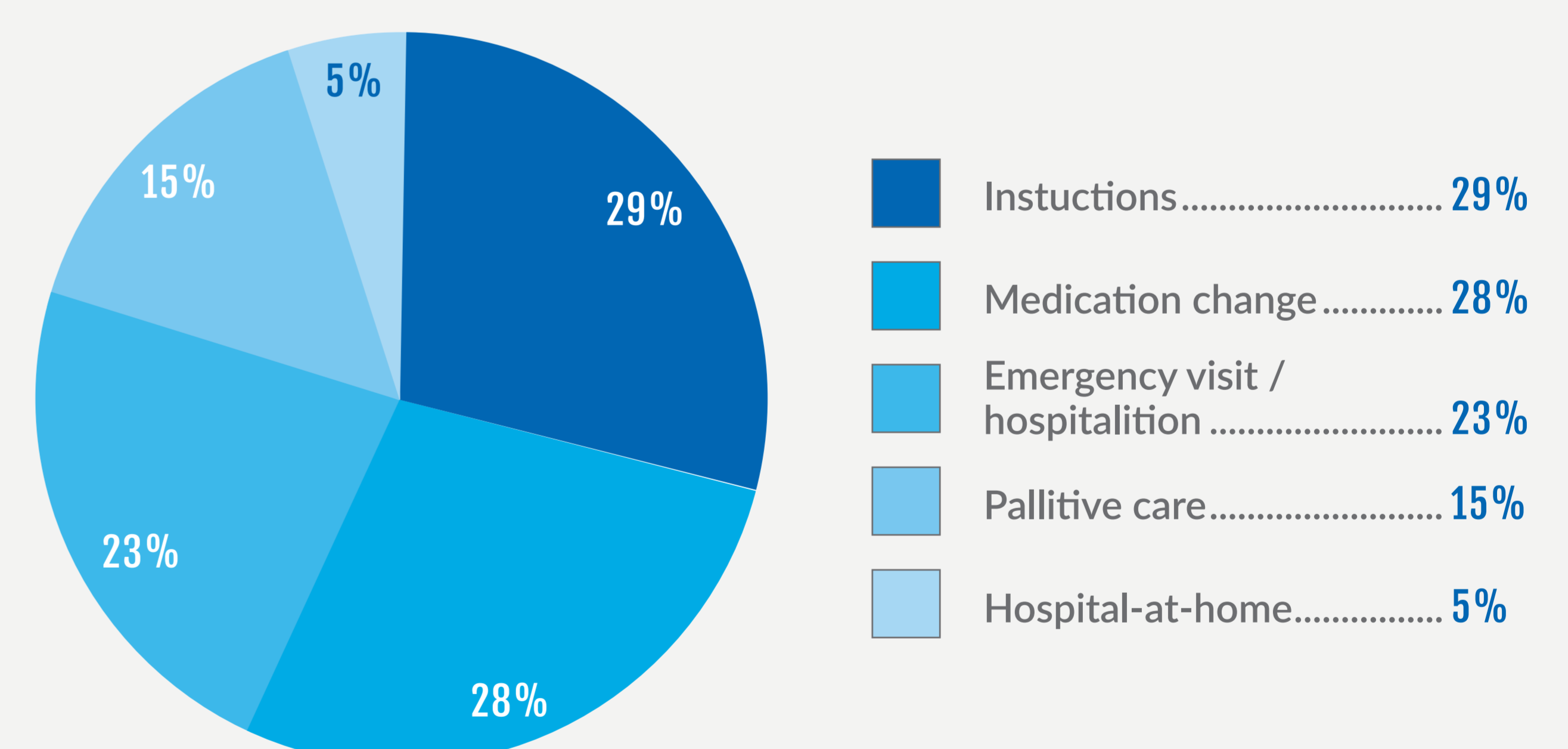


TABLE 2. WAS THE CONSULTATION BENEFICIAL WHEN ASSESSED ONE MONTH LATER?

REASON FOR CONSULTATION	INFECTION	CARDIAC	NEUROLOGIC	OTHER	TOTAL
Beneficial	18	12	14	15	59
Not beneficial	9	6	8	15	38
Total	27	18	22	30	97

TABLE 3. ATTITUDES OF THE NURSES AND GPs

How useful is the telephone service provided by GPs outside office hours to the patients ?	Not at all useful	Not so useful	Neutral	Some-what useful	Very useful	Mean
Nurses (n= 68)	0	0	1	12	55	4.78
Doctors (n= 5)	0	0	0	1	4	4.8