



Short report

Postdischarge surveillance of surgical site infections using telephone calls and a follow-up card in a resource-limited setting

J. Guerra^{a,*}, M. Isnard^a, C. Guichon^b

^a Preah Kossamak Hospital, Khan Tuol Kok, Phnom Penh City, Cambodia

^b Prupet NGO, Centre Hospitalier Moulins, Moulins Cedex, France

ARTICLE INFO

Article history:

Received 20 December 2016

Accepted 19 February 2017

Available online 24 February 2017

Keywords:

Surgical wound infection

Population surveillance

Cambodia

Infection control

Developing countries

Feasibility studies



SUMMARY

The use of a follow-up card and telephone calls appeared to be an efficient modality for postdischarge surveillance of surgical site infections (SSIs) in Cambodia. One hundred and sixty-one patients were given a follow-up card and asked to present it to any healthcare practitioner they visited during the 30 days following their surgery. Patients were subsequently telephoned to collect information. After discharge, 87% of the patients provided follow-up data. Of these, 25 patients with no SSIs detected during hospitalization reported that 'white liquid had discharged from the surgical wound'; among them, nine cases of purulent drainage were reported by a practitioner.

© 2017 The Healthcare Infection Society. Published by Elsevier Ltd. All rights reserved.

Introduction

Surgical site infections (SSIs) are the leading healthcare-associated infections in surgical patients worldwide. Most SSIs occur during the 21 days following surgery, and 13–71% occur after discharge from hospital.^{1,2}

Different modalities can be used for SSI surveillance. There is a lack of consensus on how to collect data during hospitalization and how to perform postdischarge surveillance.^{1–3} Several modalities to perform postdischarge surveillance are described in

the literature, including follow-up visits at the surgical centre, a questionnaire given to the patient and completed by a visited healthcare practitioner, a questionnaire sent to the patient, a telephone call to the patient, or a follow-up visit at the patient's home. These modalities require different levels of resources.

When resources are limited, and given rapidly increasing mobile telephone coverage, telephone calls can be an affordable modality for postdischarge surveillance. According to the World Bank, in Cambodia, the number of mobile cellular subscriptions per 100 people increased from 94 in 2011 to 133 in 2015. However, to be effective, a high contact rate is needed. Although research has shown that postdischarge contact rates vary from 38% to 93% in high-income countries,^{4,5} the authors were unable to find any information on contact rates in low-income countries.

* Corresponding author. Address: 76 rue Magenta, 69100 Villeurbanne, France.

E-mail address: j.guerra.sp@gmail.com (J. Guerra).

Even if the contact rate is high, the quality of information that is collected must be assessed. In high-income countries, the positive predictive value of the identification of SSIs by patients has been found to vary from 26% to 31%, and its negative predictive value has been found to vary from 97% to 99%.^{6,7} No information on the quality of identification of SSIs by patients was identified in resource-limited settings.

This study assessed postdischarge surveillance of SSIs in a resource-limited setting based on telephone calls and a follow-up card presented to visited healthcare practitioners.

Methods

Using an active prospective study with postdischarge surveillance, data were collected regarding the occurrence of SSIs at Preah Kossamak Hospital (PKH) in Phnom Penh, Cambodia. The study was approved by the Cambodian National Ethics Committee for Health Research (Ref. No. 36NECHR).

PKH is a 254-bed university hospital that admits a high number of patients with motor-vehicle trauma. The inclusion criteria for this study were: a consecutive sample of patients undergoing surgery at PKH, age >17 years, and still hospitalized 48 h after surgery. Each patient gave informed consent before inclusion in the study.

A follow-up card was given to each patient during their hospital stay (Figure 1). The patient was advised to present it to any healthcare practitioner they visited during the 30 days following surgery. To ensure compliance, patients were telephoned the day after discharge to remind them to present the card. The card that was presented to the healthcare practitioner asked them to record the presence or absence of purulent drainage from the surgical wound. At 15 and 30 days post

surgery, patients were telephoned to collect the information present on the follow-up card and information about visits to healthcare practitioners, and asked if any 'white liquid' had discharged from the surgical wound.

The full methodology of the study is presented in a companion paper⁸ which presents and discusses the results of different modalities used for SSI surveillance during hospitalization.

Results

From 17th April to 11th June 2011, 260 patients underwent surgery at PKH. Of these, 167 were included in the study. The male:female ratio was 1.65:1. The median age was 28 years (10th and 90th percentiles: 20.5 and 63, respectively). Most patients underwent orthopaedic procedures (40%, N = 66/164, three missing values). Patients came from 18 of the country's 24 provinces, and 24.2% lived in Phnom Penh province (N = 40/165, two missing values).

The median length of hospitalization was seven days (10th and 90th percentiles: 3.6 and 13.4, respectively). Of the included patients, 153 and 161 were discharged <15 and <30 days post surgery, respectively. After discharge, 87% of patients provided follow-up data (N = 140/161), with contact rates of 88% (N = 135/153) and 79% (N = 127/161) 15 and 30 days after surgery, respectively. The median number of attempts to reach the patient by telephone was one call (10th and 90th percentiles: 1 and 2 at 15 days post surgery and 1 and 3.8 at 30 days post surgery).

Of the 140 patients who provided follow-up data, 67% reported that they had visited a healthcare practitioner at least once (N = 94/140), with a median of five visits during the 30 days following surgery (10th and 90th percentiles: 1.3 and

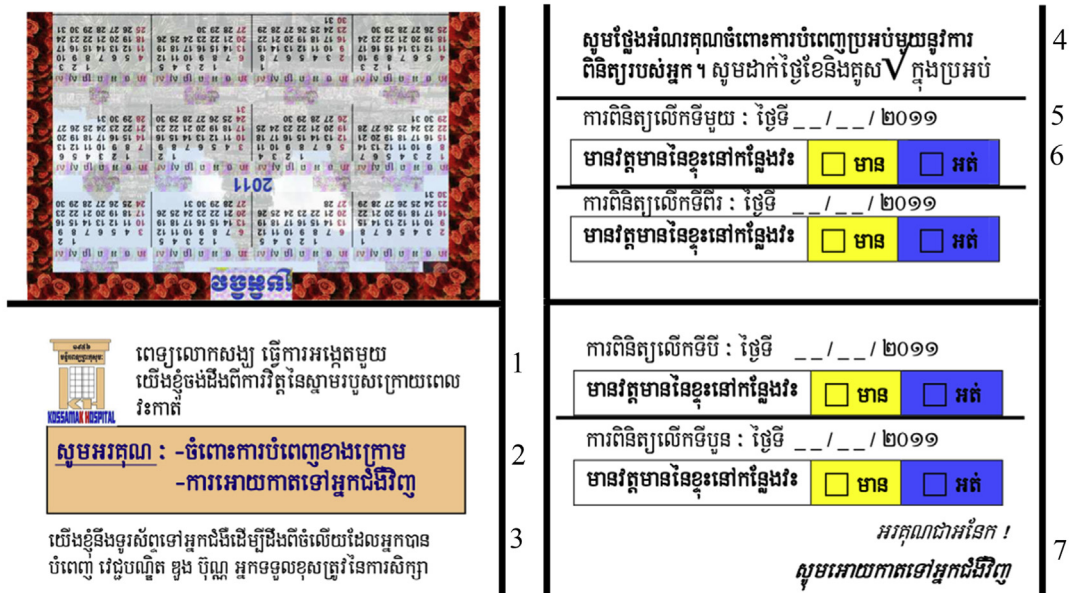


Figure 1. Follow-up card used to identify surgical site infections following discharge from hospital (real size 9 × 5.5 cm; left represents outside; right represents inside). Translation is as follows: 1, Preah Kossamak hospital is carrying out a study. We would like to assess the status of surgical wounds. 2, Please complete the card and give it back to the patient. 3, We will call the patient to collect the information. Dr Duong Bunn, Head of Surgery. 4, Please complete one line for each visit. Include today's date and tick the appropriate box. 5, Date of visit. 6, Presence of purulent drainage on the surgical wound: yes/no. 7, Thank you very much! Please return the card to the patient.

Download English Version:

<https://daneshyari.com/en/article/5668335>

Download Persian Version:

<https://daneshyari.com/article/5668335>

[Daneshyari.com](https://daneshyari.com)