Increasing patients' ability to identify their physicians with a photo album: a prospective study

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Summary

Objectives: Patients in teaching hospitals often encounter difficulty in correctly identifying their physicians. We hypothesized that a photo album of physicians might increase the ability of patients to correctly identify their physicians and hence conducted this study to test the hypothesis.
Design: A prospective study was conducted.
Setting: Department of Surgery, The Third XiangYa Hospital.
Participants: The patients were divided into two groups on admission: group A as intervention group ($n = 75$) and group B as control group ($n = 94$). All the patients were verbally informed of their medical team but only the patients in group A (the intervention group) were also shown the photos of their medical team.
Main outcome measures: One day before being discharged, the patients in group A (the intervention group) were asked to return the photo albums, and all the patients from both groups were asked to give the names of their caring physicians prior to departure from the hospital.
Results: Only 53% of the patients (50 out of 94) in group B (the control group) could give at least one of their physicians' name, while 85% of the patients (64 out of 75) in group A (the intervention group) could tell at least one of their physicians' name; there is a significant difference ($p < 0.005$, 95% CI, 17.4–44.7%).
Conclusion: Patients' ability to identify their physicians can be significantly increased with a photo album.

Keywords

quality improvement, medical management

Introduction

While the safety and satisfaction of patients are closely related to the ability to effectively communicate with their physicians in a timely fashion, patients staying in teaching hospitals often encounter difficulty in correctly identifying their physicians, owing primarily to the large size of the house staff, i.e. attending physicians, residents, consultants, fellows, interns and trainee doctors.[1–3]

Recent studies demonstrated that only 10% of patients were able to correctly identify any of the physicians caring for them in the in-patient department[2] and patients' ability to correctly identify their physicians was increased when the physicians' names were constantly presented in the rooms.[3] Previous studies also showed that photos of physicians displayed on the wall of the patients' rooms could help patients correctly identify their physicians, which resulted in greater satisfaction with their care.[1] Therefore, we hypothesized that a photo album of physicians might also increase the ability of patients to correctly identify their physicians; hence we conducted this study to test the hypothesis.

Methods

We conducted a prospective controlled study of patients admitted to the In-patient General Surgery Department of the Third Xiangya Hospital of Central South University from 1 May 2012 to 30 June 2012. The department was located on one floor and was composed of two wards. There were 48 rooms and 124 beds in each ward. The photo album was composed of colour photos (8×12 cm) of the members of the medical team caring for the patients. The professional role of each member was displayed under the photo. Patients were admitted to the wards according to the routine protocol. On admission, each patient was verbally informed by a nurse of the medical team treating him/her. The photos of the medical team were shown to the patients in Group A (the intervention group) but not in Group B (the control group). One day before being discharged, the patients in group A were asked to return the photo albums and all the patients from both groups were asked to give the names of their caring physicians prior to departure from the hospital. Patients

Table 1. Characteristics of patients in group A (intervention group) and group B (control group).

Variables	Group A ($n = 75$)	Group B ($n = 94$)
Age (years)*	50 (16–86)	48 (14–81)
Gender: male no (%)	36 (46)	39 (41)
Days of hospital stay*	10 (2–24)	10 (2–105)

*The average (minimum–maximum) of the sample.

discharged later than June 30 were excluded from this study, which finally included 75 patients in group A and 94 patients in group B. Permission from the Hospital Ethics Committee was obtained for the study. No patient had cognitive impairment.

The proportions of patients in the two groups who were able to correctly give at least one name in his or her medical team were recorded. Exact binomial 95% confidence intervals (CIs) were determined for these two proportions. Difference between these two proportions, in addition to the 95% CIs, was compared using the Fisher exact test (MedCalc version 11, MedCalc Software Ltd, Mariakerke, Belgium) and $p < 0.05$ was considered to be statistically significant.

Results

As shown in Table 1, the age, days of hospital stay and gender ratio of patients were similar for the two groups. Only 53% of patients (50 out of 94) in group B (the control group) could give at least one of their physicians' name (95% CI, 52–54%), while 85% of patients (64 out of 75) in group A (the intervention group; 95% CI, 76–94%) could tell at least one of their physicians' name, with 32% difference between the two groups. There was a significant difference ($p < 0.005$, 95% CI, 17.4–44.7%), which attests to the benefit of using photographic display to help patients remember the names of the medical staff.

Discussion

In this study, we found that showing a photo album of their medical team to the patients can significantly increase their ability to identify their caring physicians.

In comparison to the results of previous studies, the ability of the patients in our study to correctly identify their caring physicians is relatively higher (10–25% vs. 53%).[1–3] This may be in part due to different patient populations studied, because the other investigations were all conducted in the internal

medicine department, where the majority of the patients were aged subjects.[1–3] Our study, to the best of our knowledge, is the first to perform such an investigation in the general surgery department, where most of the patients are middle-aged and hence their cognitive ability is less likely to be impaired.[1–3] Longer hospital stay in our study population than the previous investigations (10d vs. 4d) may be another reason accounting for the higher nominal recognition of their physicians in our study.[1–3]

It is recognized that displaying the photos of the caring physicians on the walls of the patients' rooms can significantly improve their ability to identify their physicians;[1] likewise, our study shows that a photo album of the caring physicians of the patients can have the same effect. Of note, we found that both patients and staff disliked the practice of displaying photos of staff members on the walls of the patients' rooms, and favoured the use of photo albums. Though this work has been conducted in the department of surgery, it has impact on the daily practice of all specialties, including internal medicine.

Conclusion

Patients' ability to identify their physicians can be significantly increased with a photo album.

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