Published in final edited form as:

Emerg Med J. 2018 November ; 35(11): 701–703. doi:10.1136/emmermed-2018-207735.

The Presence of Companions during Emergency Department Evaluation and its Impact on Perceptions of Clinician-Patient Communication

Talea Cornelius, PhD¹, Nathalie Moise, MD, MS¹, Jeffrey L. Birk, PhD¹, Donald Edmondson, PhD¹, and Bernard P. Chang, MD, PhD²

¹Center for Behavioral Cardiovascular Health, Columbia University Medical Center, New York, NY

²Department of Emergency Medicine, Columbia University Medical Center, New York, NY

Abstract

Objectives.—Research in outpatient setting suggests that the presence of companions during a medical encounter can improve clinician-patient communication. It is not known if the presence of companions has a similar effect in the acutely stressful context of the Emergency Department (ED). This study tested whether the presence of companions in the ED relate to stronger clinician-patient communication. We further explored effect modification by demographic factors (race/ethnicity, education, language) thought to compromise communication.

Methods.—Participants were drawn from an observational cohort study of patients with suspected acute coronary syndrome ($N = 876$) recruited from an urban academic medical center between 2013–2016. Patient interviews occurred both in the ED and post-ED-discharge; communication was assessed using the Interpersonal Processes of Care (IPC) Survey, and companions were categorized as close others (i.e., partner/spouse, child), non-close others (e.g., neighbor), or no one.

Results.—Perceptions of clinician-patient communication were high ($M = 57.06$, $SD = 10.59$; Range 14.00, 70.00). There was no association between companions (close/non-close/no one) and clinician-patient communication, $p = .262$. Demographic factors were unrelated to communication. There was a significant interaction between education and companions. Having a close other in the ED was associated with stronger clinician-patient communication only for patients with High School education or less, $p = .027$.

Conclusions.—Neither the presence of companions nor demographic factors were related to clinician-patient communication. The interaction effect suggesting that patients completing High School or less have the most to gain from the presence of close others warrants further exploration.

Correspondence concerning this article should be addressed to Talea Cornelius, Center for Behavioral Cardiovascular Health, Columbia University Medical Center, 622 W. 168th St. PH9-319, New York, NY, 10032; tmc2184@cumc.columbia.edu; phone: 212-304-5215; fax: 212-342-3431.

Author Contributions: DE conceived and designed the study, obtained research funding, and contributed to manuscript revisions. TC conducted data analysis. TC, NM, and BPC conceptualized the design of the manuscript and drafted the manuscript. JLB contributed to manuscript revisions.

Conflicts of Interest: All authors report no conflicts of interest.

Keywords

clinician-patient communication; acute coronary syndrome; social support; emergency department

Strong clinician-patient communication, characterized by clarity, concern, and collaboration, is associated with patient satisfaction and treatment compliance.[1] In high-stress care environments, such as the emergency department (ED), there are numerous contextual and psychological barriers to effective communication[2] (e.g., overcrowding, lack of privacy, interruptions, fear, concerns about death)[3] which may limit patients' abilities to effectively express, process, and retain information.

Few studies have examined the potential benefit of having a companion in the ED—who may serve as an advocate or help patients remember disposition plans and instructions[4]—in promoting effective clinician-patient communication. Studies are also needed to distinguish effects of close others in the ED (who are greatly impacted by the acute event themselves, i.e., a spouse/partner or a child) as compared to more casual companions (non-close others, e.g., a neighbor).

The goal of this study was to examine whether the presence of companions (versus no one) in the ED impacts patient perceptions of clinician-patient communication in patients evaluated for acute coronary syndrome (ACS) and to compare the effects of close to non-close companions. We hypothesized that patients would perceive strongest communication when close others were present. We further explored whether effects differed across demographic factors associated with healthcare disparities (i.e., race/ethnicity, English as a first language, education).[5]

METHODS

Participants

Participants were English- and Spanish-speaking patients ≥ 18 years of age who presented to the ED with an admitting diagnosis of non-ST-elevation myocardial infarction (NSTEMI) or unstable angina (UA) with complete data ($N = 876$) drawn from an ongoing observational cohort study (REactions to Acute Care and Hospitalization; REACH), and recruited between 2013–2016 at an urban quaternary academic medical center ED. Exclusion criteria were terminal non-cardiovascular illness with life expectancy < 1 year, severe mental illness, significant cognitive impairment, known significant alcohol or substance abuse, and unavailability for follow-up.

Procedure

Research assistants identified a consecutive sample of all patients with an admitting diagnosis of UA or NSTEMI via electronic health record and approached them to confirm eligibility and gauge interest in participation. Participants completed written informed consent and a brief interview in the ED. Approximately three days post-ED discharge (inpatient or home), patients reported on companions in the ED and perceptions of clinician-

patient communication. Study procedures were approved by the Columbia University Institutional Review Board.

Measures

Doctor-patient communication.—The 14 doctor-specific items of the Interpersonal Processes of Care (IPC) Survey is a valid and reliable assessment of communication, information conveyed, and shared decision-making in both English- and Spanish-speaking patients.[6] Items are scored from 1, *never*, to 5, *always*, and summed. The scale demonstrated good internal consistency reliability in this study, *Chronbach's* $\alpha = .84$.

Demographics.—Participants self-reported partner status, gender, race/ethnicity, education, whether they spoke English as a first language, and whether a companion was present with them in the ED. Three non-overlapping categories of companions were created: (1) bringing a *close other* to the ED (i.e., spouse/partner or child); (2) bringing a *non-close other* to the ED (i.e., other relative, neighbors/friends, church/other community member, and/or home attendant/visiting nurse); and (3) bringing *no one*.

Medical characteristics.—Medical characteristics and date of birth were extracted via chart review. Confirmed ACS was determined with adjudication by a research nurse and board-certified cardiologist. Charlson comorbidity index denotes a weighted risk-score predicting one-year mortality based on the presence of 19 comorbid medical conditions.[7] Global registry of acute coronary events (GRACE) risk scores represent a prediction model for patient mortality six months post-discharge.[8]

Data Analysis Strategy

Analysis of Variance (ANOVA) tested the effect of companion type in the ED (i.e., close, non-close, no one) on clinician-patient communication. Levene's test was used to examine homogeneity of variance in IPC scores (see SOM for further explanation and results). Analysis of Covariance (ANCOVA) incorporated control variables: ACS status, Charlson, GRACE, partner status, gender, race/ethnicity, education, first language, and age. Three ANCOVAs tested interaction effects between companion type with education, first language, and race/ethnicity. Significance was set at $p < .050$.

RESULTS

Refusal rate in REACH was approximately 40%, resulting in a sample of 1,000. Due to IRB restrictions regarding data collection on patients who did not enroll, specific details regarding refusal rates, ineligibility, etc., were not available. Those excluded from the analysis ($n = 124$; 12.4%) were more likely to report trade school/some college, $p < .050$, English as their first language, $p = .012$, or arriving in the ED with non-close others, $p < .001$, and to not have confirmed ACS, $p = .002$.

For the 876 patients included in the analysis, mean scores on clinician-patient communication were high ($M = 57.06$, $SD = 10.59$; Range 14.00, 70.00). There was no main effect of companions in the ED on patient perceptions of clinician-patient communication, p

= .262 (covariate-adjusted $p = .280$). Demographics and medical characteristics were not associated with clinician-patient communication.

Having close others in the ED was associated with better clinician-patient communication only for patients who completed High School or less, $p = .027$ (see Figure 1; see also Supplemental Table S1). No other interaction effects were significant: language, $p = .792$; race/ethnicity, $p = .306$.

DISCUSSION

There was no main effect of companions on patients' perceptions of clinician-patient communication. Our findings differ from prior research in non-acute settings in which companions can improve both clinician and patient understanding of chief complaints during visits.[9] Results also differ from those indicating that the presence of others may compromise patient privacy and history-taking.[10] It is possible that the high-stress ED environment makes it challenging for close others to engage effectively with the clinician[5] or that cross-cutting experiences (e.g., time pressure, the critical nature of the event) promote stronger communication more broadly.

There were no main effects of demographic factors on clinician-patient communication.[5] However, arriving in the ED with close others was associated with improved clinician-patient communication for patients completing High School or less (versus those with higher levels of education), suggesting these patients may uniquely benefit from having close others in the ED (or may otherwise be at a unique disadvantage). Reasons for this finding are unclear; however, close others may be a greater asset for patients with lower literacy through a variety of potential mechanisms (e.g., writing down and/or recalling discharge instructions, serving as patient advocates, asking additional questions that may enhance patient understanding, safety, and care).

Limitations

Perceived strength of clinician-patient communication (communication, information conveyed, shared decision-making) was self-reported, thus may be biased, and may not capture actual understanding of medical history (by the clinician) or patient comprehension of diagnosis/discharge instructions. Future research should gather reports on communication quality from clinicians and companions, as well as information on relationship quality and type of support. Diverse methodologies, including structured follow-up patient interviews, observational coding of clinician-patient/patient-family communication, and assessments of information retention/knowledge-sharing should be considered. Finally, the nature of the complaint (e.g., perceived severity of symptoms) could impact whether patients arrive with others as well as clinician-patient communication. Whether or not patients have family members to serve as potential companions should also be explored.

CONCLUSIONS

Strong clinician-patient communication in the ED is critical, yet challenging. Our study suggests that close companions can be beneficial amongst patients at greatest risk for poor clinician-patient communication.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

Grant Support :This work was supported by National Heart, Lung, and Blood Institute (NHLBI) grants to DE [grant numbers R01HL117832, R01HL128310] and IK [R01HL123368] and NM [R01 HS025198]. BPC is supported by a mentored career development grant by the National Institute of Health/NCAT [KL2 TRANSFORM: KL2TR0001874] and the NY Empire Clinical Research Investigator Program.

References

1. Zolnieriek KBH, DiMatteo MR. Physician communication and patient adherence to treatment: a meta-analysis. *Medical care* 2009;47(8):826. [PubMed: 19584762]
2. Burley D Better communication in the emergency department. *Emergency Nurse* 2011;19(2)
3. Edmondson D, Shimbo D, Ye S, et al. The association of emergency department crowding during treatment for acute coronary syndrome with subsequent posttraumatic stress disorder symptoms. *JAMA internal medicine* 2013;173(6):472–75. [PubMed: 23400256]
4. Gordon J, Sheppard LA, Anaf S. The patient experience in the emergency department: A systematic synthesis of qualitative research. *International Emergency Nursing* 2010;18(2):80–88. [PubMed: 20382369]
5. Betancourt JR, Green AR, Carrillo JE, et al. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public health reports* 2016
6. Stewart AL, Nápoles-Springer AM, Gregorich SE., et al. Interpersonal Processes of Care Survey: Patient-reported measures for diverse groups. *Health Serv Res* 2007; 42(3p1): 1235–1256. [PubMed: 17489912]
7. Charlson M, Szatrowski TP, Peterson J, et al. Validation of a combined comorbidity index. *Journal of clinical epidemiology* 1994;47(11):1245–51. [PubMed: 7722560]
8. Fox KA, Dabbous OH, Goldberg RJ, et al. Prediction of risk of death and myocardial infarction in the six months after presentation with acute coronary syndrome: prospective multinational observational study (GRACE). *bmj* 2006;333(7578):1091. [PubMed: 17032691]
9. Schilling LM, Scatena L, Steiner JF, et al. The third person in the room: frequency, role, and influence of companions during primary care medical encounters. *Journal of Family Practice* 2002;51(8):685–92. [PubMed: 12184964]
10. Stoklosa H, Scannell M, Ma Z, et al. Do EPs change their clinical behaviour in the hallway or when a companion is present? A cross-sectional survey. *Emerg Med J* 2018:emermed-2017–207119.

What is already known on this subject?

- Research in outpatient settings suggests the presence of companions during medical encounters can facilitate strong clinician-patient communication.
- Whether companions relate to communication in the acutely stressful context of the emergency department (ED) is unknown.

What this study adds

- In this study interviewing 876 patients who were evaluated in the ED for suspected acute coronary syndrome (ACS), companions in the ED were not associated with patients' perceptions of clinician-patient communication.
- Close others were associated with better clinician patient communication only for patients completing High School or less.
- Patients completing High School or less, who are generally at risk for poor communication, may uniquely benefit from having close others in the ED

Figure 1.

Patient ratings of doctor-patient communication separated by education and presence/type of others in the emergency department during evaluation for acute coronary syndrome. Participants with High School or Less reported significantly stronger clinician-patient communication when Close Others were present (vs. both No One and Non-Close Others). There were no significant differences for those with No One, Close Others, or Non-Close Others in the Emergency Department for participants with Trade School/Some College or for participants with a College or Graduate Degree.

Table 1.Demographics for $N = 876$ and by presence of companions in the ED.

		Overall
		M^a (SD^b) or N (%)
Age		60.80 (12.95)
Partner	<i>Yes</i>	399 (45.55%)
	<i>No</i>	477 (54.45%)
Gender	<i>Male</i>	472 (53.88%)
	<i>Female</i>	404 (46.12%)
Race	<i>White</i>	149 (17.01%)
	<i>Black</i>	176 (20.09%)
	<i>Other</i>	62 (7.08%)
	<i>Hispanic</i>	489 (55.82%)
Education	<i>High School or Less</i>	491 (56.05%)
	<i>Trade School or Some College</i>	146 (16.67%)
	<i>College or Graduate Degree</i>	239 (27.28%)
English as a First Language	<i>Yes</i>	445 (50.80)
	<i>No</i>	431 (49.20%)
Confirmed ACS ^c	<i>Yes</i>	294 (33.56%)
	<i>No</i>	582 (66.44%)
GRACE ^d		92.90 (29.39)
Charlson		1.81 (1.98)
IPCS ^e Doctors		57.06 (10.59)