Patient Education and Counseling 99 (2016) 1694–1698

Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pateducou

When authenticity matters most: Physicians' regulation of emotional display and patient satisfaction

Dana Yagil*, Moran Shnapper-Cohen

University of Haifa, Israel

ARTICLE INFO

Article history:
Received 1 November 2015
Received in revised form 1 March 2016
Accepted 8 April 2016

Keywords:
Emotion regulation
Distress
Patient satisfaction

ABSTRACT

Objective: The emotions expressed by physicians in medical encounters have significant impact on health outcomes and patient satisfaction. This study explored how physicians' regulation of displayed emotions affects patients' satisfaction, under low and high levels of patient distress and length of physician-patient acquaintance.
Methods: Questionnaires were administered to 46 physicians and 230 of their patients (before and after the medical encounter) in outpatient clinics of two hospitals.
Results: Data were analyzed with hierarchical linear modeling which takes the nested data structure into account. We found a significant interaction effect of physician regulation of displayed emotions and patient distress on satisfaction: When distress was high, physician regulation of emotions was negatively related to patient satisfaction. The results also show a significant interaction effect of physician regulation of displayed emotions and length of physician-patient acquaintance: With a longer acquaintance, physician regulation of emotions was negatively related to patient satisfaction.
Conclusion: The effect of the physicians' emotional display on patient satisfaction depends on contextual factors, such as patient distress and length of physician–patient acquaintance, which affect patients' emotional needs and expectations.
Practical implications: When patients have high emotional involvement in the encounter it is suggested that physicians consider presenting genuine emotions to patients.

1. Introduction

Physicians' expression of positive emotions in medical encounters is associated with positive health outcomes [1–5], well-being [5], and patient satisfaction with medical care [6–8]. For example, physicians who expressed more empathy were evaluated more positively [9] and had patients who reported higher levels of satisfaction and were more compliant with their doctors' advice [7]. However, physicians experiencing and displaying emotions in medical encounters might face a conflict. Traditional views of the medical profession require an unemotional, objective, authoritative approach. In addition, emotional neutralization is viewed as supporting physicians when coping with emotional challenges in interactions with patients [10,11]. Accordingly, physicians' socialization and professional norms have encouraged emotional detachment [11,12]. The tension between expression of emotions and maintenance of an emotionally neutral, objective position is expressed in the notion of "detached concern," which reflects the need to present outward caring while inwardly maintaining the emotional distance and calm required for optimal medical performance [13–15].

Ideas regarding emotional expression in medical encounters have changed considerably over time. In the last three decades, the medical profession has emphasized the emotional aspects and the importance of empathy and compassion as inherent to the profession [11,15]. Physicians' communication with patients is viewed as an important factor in the medical treatment process [5,16,17]. Despite this shift, emotional detachment prevails when physicians experience negative emotions during the medical encounter [15]. When physicians are unable to spontaneously experience positive emotions due to situational factors (e.g., work overload) or personal factors (e.g., cynicism), they may have to engage in emotion regulation [4]—i.e., 'The processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions' ([18], p. 275). Physicians need emotion regulation skills to manage and express their own emotions as well as to allow patients to express their emotions during a consultation [7,16].

* Corresponding author at: Department of Human Services, University of Haifa, Haifa 31905, Israel.
E-mail address: dyagil@research.haifa.ac.il (D. Yagil).

http://dx.doi.org/10.1016/j.pec.2016.04.003
0738-3991/

Emotions may be regulated either by antecedent-focused strategies which are employed before the emotion has fully developed (e.g., reappraisal of the situation) or by response-focused strategies which are applied once an emotion is already underway (e.g., faking a displayed emotion through intensification) [19,20]. While physicians' cultivation of genuine empathy through antecedent-focused strategies is certainly desirable, suppressing negative emotional reactions and faking positive reactions, such as empathy, might be also beneficial for patients [21,4] and signify commitment to caring [22]. However, no knowledge exists regarding the impact of inauthentic expression of positive emotions. Research into this impact is necessary because physicians tend to view faking emotional display as part of their job, as a way of coping with the tension between internal emotional neutrality or negative emotions and the requirement to display caring. Furthermore, research in non-professional service contexts suggests that the response-focused strategy of surface acting, namely modification of displayed emotions while internal emotions remain unchanged [23], is negatively associated with customer satisfaction [24].

Accordingly, the present study focused on the effect of surface acting on patient satisfaction, and explored contextual conditions under which such regulation of displayed emotions might have negative or positive outcomes, i.e., patient's distress level and length of physician-patient acquaintance. Distress affects the patient's emotional needs in the encounter as well as expectations regarding the physician's genuine emotional support [25]. Length of acquaintance significantly contributes to relationship strength [26] defined as the intensity and depth of the relationship [27]. Relationship strength is a major factor in the quality of the physician–patient relationship and has a key role in understanding various aspects of the relationship [26] and affecting the outcomes of service providers' emotional display [27].

Although the major impact of physicians' emotional expression on patient-related outcomes is acknowledged, physicians' surface acting is an under-researched area [7]. To the best of our knowledge, this is the first study to explore the relationship of displayed emotions and patient satisfaction. By exploring conditions that determine the effect of physicians' regulation of displayed emotion on patient satisfaction, we seek to extend the knowledge on this important aspect of the medical encounter.

2. Methods

2.1. Participants

The sample consisted of 46 physicians who worked at outpatient clinics in the hospitals between 2011 and 2012, and 230 patients; five patients of each physician. Of the physicians, 38 were male (83%) and most of them were married (91%). The mean age was 53 (SD 6.85), ranging from 37 to 68. The mean seniority as a doctor was 26 years (SD 7.12), ranging from 2 to 36. The apprenticeship divisions were as follows: surgery (12), orthopedics (11), opthalmology (8), gynecology (5), otolaryngology (3), pulmonary (2), urology (2), nephrology (2), and gastroenterology (1).

Of the patients, 138 were female (60%). The mean age was 45 (SD 18.15); the mean years of education was 13 (SD 2.54); 82% were born in Israel. The mean length of physician–patient acquaintance was three meetings.

2.2. Measures

2.2.1. Regulation of displayed emotion-surface acting

Physicians' surface acting in the medical encounter was assessed with a scale consisting of seven items (response scale: 1 = not at all; 7 = frequently) that is based on a measure frequently used to assess surface acting in non-medical service contexts [28]. To evaluate the appropriateness of the items to the context of medical encounters, brief interviews were conducted with 10 physicians working in outpatient clinics and hospitalization units, asking about the emotional aspects of their interaction with patients and the suppression and display of genuine emotions (e.g., "Do you ever fake your emotions in medical encounters?; Which emotions do you fake?"). Following previous studies which have revised the original scale (e.g., [29]), the final scale consisted of four out of five items of the original scale ('I pretend, in order to cope with patients properly'; "I put on a 'mask' to present the emotions I am required to display in my job"; "I fake a good mood"; "In my job I act as if I am 'on stage") and additional three items based on the interviews, which reflect the effort physicians make to hide their true emotions from patients ("In my work I put on a 'matter-of-fact mask' to hide the various emotions I experience"; "I play a role and make an effort so that patients will not see what I am truly feeling"; "There is a gap between what I feel and what the patients would say they see and feel regarding my emotions."). ($\alpha = .88$).

2.2.2. Patient satisfaction

Patients' satisfaction was measured via 17 questions [30], asking patients to report their satisfaction with the information provided by the physician, the emotional aspect of the encounter, and general satisfaction with the encounter (response scale: 1 = not satisfied at all; 7 = very satisfied). As the correlations between the sub-scales were high (ranging between $r = .76$ to $r = .84$) we have summarized all the items to a single score ($\alpha = .98$).

2.2.3. Distress

Distress was assessed by asking patients the following question: "To what degree do you evaluate your illness as severe?" (Response scale: 1 = not severe at all; 10 = very severe) [31].

2.2.4. Length of physician–patient acquaintance

Length of acquaintance was measured by asking patients the following: "How many times have you met the physician in the past? (Not just in regard to your present medical condition)." [27]

The categories of surface acting, distress and length of acquaintance were calculated according to the medians (Low = below the median; High = above the median).

2.3. Procedure

Participants were physicians and their patients in outpatient clinics of two hospitals in the North of Israel. After receiving the approval of the university and hospital ethics committees and the hospital director, the head nurse of the outpatient clinics in each hospital provided the names of all the physicians working there. Next, the managers of outpatient clinics were asked for approval to conduct the study in their unit. When approval was received, the units' physicians were asked to participate in the study (response rate = 97%). This was followed by administering questionnaires to five patients of each physician (response rate = 80%). Patients' data were collected at two time points: illness-related distress was measured before the consultation and satisfaction was measured immediately after the consultation.

3. Results

Means, standard deviations and ranges of the research variables are presented in Table 1. Analyses were conducted with hierarchical linear modeling (HLM) using PROC Mixed command in SAS. This analysis takes into account the nested data structure

Table 1
Means and standard deviations of physicians' regulation of displayed emotion, length of acquaintance, patient distress and patient satisfaction.

		Mean (SD)	Range	N
Physicians				
Regulation of displayed emotion (surface acting)	All	3.22 (1.36)	6	46
	Low	2.15 (0.62)	1.86	23
	High	4.30 (0.98)	3.86	23
Patients				
Length of acquaintance	All	2.71 (3.88)	20	224
	Low	0.69 (0.83)	2	147
	High	6.56 (4.47)	17	77
Distress	All	4.83 (2.71)	9	223
	Low	3.08 (1.47)	4	142
	High	7.89 (1.32)	4	81
Patient satisfaction	All	4.27 (0.77)	5.54	230

Table 2
Hierarchical model for the moderating effect of patient distress on the relationship between physicians' regulation of displayed emotion and patient satisfaction.

	Model 1		Model 2	
Variables	B	SE	B	SE
Regulation of displayed emotions	−0.08	(0.04)	−0.08*	(0.04)
Patient distress	0.00	(0.02)	0.01	(0.02)
Patient distress* Regulation of displayed emotions			−0.03*	(0.01)
% explained variance			1.3	

* $p < 0.05$.

(i.e., the patient-level data were constructed so that they were nested in the higher level of the physicians' data).

The results show a significant interaction effect of physicians' regulation of displayed emotions and patient distress (Table 2). We interpreted the forms of the interaction by plotting the simple slopes. As depicted in Fig. 1, when distress is high, physicians' regulation of displayed emotions is significantly and negatively related to patient satisfaction ($\beta = -.16$, $p < .05$) but when distress is low the relationship of emotion regulation with satisfaction is not significant ($\beta = .04$, ns).

The results also show a significant interaction effect of physicians' regulation of displayed emotions and length of acquaintance (Table 3). Simple slope analyses show that physicians' regulation of emotions is significantly and negatively related to patient satisfaction when acquaintance is longer ($\beta = -.18$, $p < .05$) but not under shorter acquaintance ($\beta = -.02$, ns) (see Fig. 2).

4. Discussion and conclusion

4.1. Discussion

This study examined the relationship between physicians' regulation of displayed emotion and patient satisfaction in regard to two conditions: patient distress and length of physician–patient acquaintance. The results show that physician emotion regulation was negatively related to patient satisfaction, but only under certain contextual conditions. When patient distress was high, the physicians' regulation of displayed emotions was negatively related to satisfaction. Research suggests that the regulation of

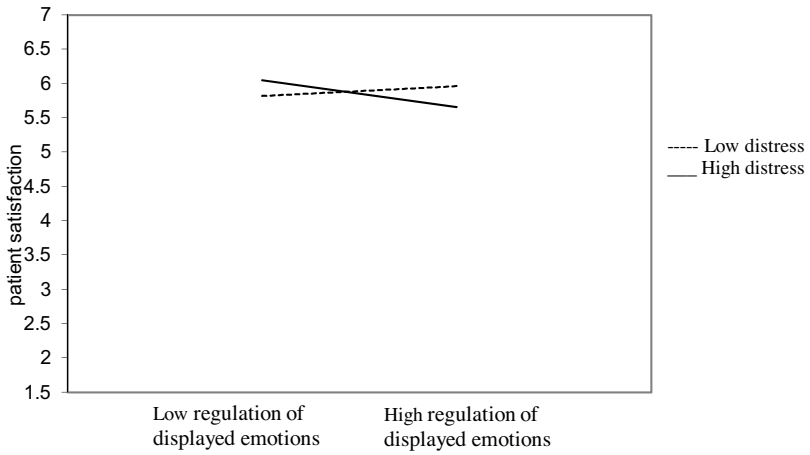

Fig. 1. Interaction effect of physicians' regulation of displayed emotions and patient distress on patients' satisfaction.

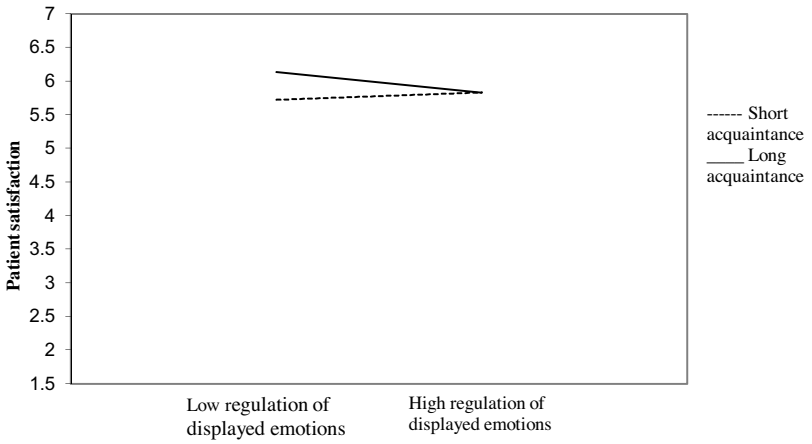

Fig. 2. Interaction effect of physicians' regulation of displayed emotions and length of acquaintance on patients' satisfaction.

Table 3
Hierarchical model for the moderating effect of length of acquaintance on the relationship between physicians' regulation of displayed emotions and patient satisfaction.
$^{**}p < 0.01$.

	Model 1		Model 2	
Variables	B	SE	B	SE
Regulation of displayed emotions	−0.07	(0.04)	−0.09*	(0.04)
Length of acquaintance	0.006	(0.01)	−0.008	(0.01)
Length of acquaintance * Regulation of displayed emotions			−0.03**	(0.01)
% explained variance			3.8	

$^{*}p < 0.05$.
$^{**}p < 0.01$.

displayed emotions increases the target's sense of uncertainty because such emotions convey vague information [32]. Highly distressed patients are likely to seek a high level of certainty in their interaction with the physician, and react negatively to vagueness, thus experiencing less satisfaction as a result of physicians' emotion regulation. Furthermore, the inauthenticity involved in regulation of displayed emotions might undermine the patient's trust in the physician, which is especially detrimental when distress is high [33].

The results show also that when the physician–patient relationship is stronger, the relationship between emotion regulation and satisfaction is negative. This result supports the theory [26] regarding the differences between weak and strong service relationships, suggesting that when the relationship is weaker, patients' expectations are directed only to the instrumental outcomes of the encounter, whereas in stronger relationships, patients expect the physician also to satisfy their emotional needs, and thus view negatively the inauthenticity involved in the regulation of displayed emotions. In addition, in weaker relationships, patients might be less familiar with the physician's emotional expression, and thus be less likely to detect inauthentic emotional display. These results are in contrast to the findings of another study [27] indicating that the suppression of negative emotions was negatively related to satisfaction in weak relationships. However, this other study was conducted in a non-professional context where customers are less involved in the service and its outcomes than in the medical context, and therefore customers are likely to be more forgiving if their relationship with the service provider is strong [27].

The results contribute to the literature in several ways. Although previous research has documented the positive effect of physicians' expressions of emotion [2,5], to the best of our knowledge, this is the first study to show that emotion regulation is related to patient satisfaction. Several authors [34–36] have recommended regulation of displayed emotions. Our findings suggest that, regarding the physicians' emotion display, it is important to consider context variables such as patient-related variables and characteristics of the physician–patient relationship.

The study has both strengths and limitations. One strength is the collection of data from two sources—physicians and patients, and from patients at two time points, thus minimizing single source bias [37]. The scale of emotion regulation was carefully developed with quantitative and qualitative tools to adapt it to the medical context. In terms of limitations, the cross-sectional design precludes making definite causal statements. The study was conducted in hospital outpatient clinics, which are likely to have context-specific characteristics in terms of patients' and physicians' personal characteristics as well as types of relationships. Future research is recommended to explore the variables in other medical contexts to test the generalizability of the results. In this study, we explored the effect of emotional display only on patient satisfaction. Physicians' emotional expression was found to affect health outcomes [2] but there is no data regarding the effect of emotion regulation on such outcomes. Thus, future research is recommended to explore the effect of physicians' regulation of emotional display on health outcomes and well-being. The present study focused on patient satisfaction as a function of physicians' regulation of displayed emotions, yet additional factors related to the physician's characteristics (e.g., professional skills) and behavior (e.g., provision of information) were found to have a significant effect on patient satisfaction [38,39] Future research could explore the interactive effects of emotion regulation with these variables on satisfaction.

4.2. Conclusion

The study shows that, although presenting positive emotions to patients is considered beneficial, the impact of displaying insincere emotions depends on contextual factors. When patients are distressed or when the relationship with the physician is strong, a display of insincere emotions is negatively related to patient satisfaction.

4.3. Practice implications

The results suggest that the notion of "detached concern," when positive emotions are presented and internal neutrality is maintained, might be suitable in situations in which patients are less involved. When patients have high emotional involvement in the encounter it is suggested that physicians consider presenting more genuine emotions to patients.

References

[1] Z.D. Blasi, E. Harkness, E. Ernst, Influence of context effects on health outcomes: a systematic review, Lancet 357 (2001) 757–762.
[2] M. Hojat, D.Z. Louis, F.W. Markham, et al., Physicians' empathy and clinical outcomes for diabetic patients, Acad. Med. 86 (2011) 359–364.
[3] S.H. Kaplan, S. Greenfield, J.E. Ware, Assessing the effects of physician-patient interactions on the outcomes of chronic disease, Med. Care 27 (1989) 110–127.
[4] E.B. Larson, X. Yao, Clinical empathy as emotional labor in the patient-physician relationship, J.Am. Med. Assoc. 293 (2005) 1100–1106.
[5] R.L. Street, G. Makoul, N.K. Arora, et al., How does communication heal? Pathways linking clinician-patient communication to health outcomes, Patient Educ. Couns. 74 (2009) 295–301.
[6] S.G. Henry, A. Fuhrel-Forbis, M.A. Rogers, et al., Association between nonverbal communication during clinical interactions and outcomes: a systematic review and meta-analysis, Patient Educ. Couns. 86 (2012) 297–315.
[7] K. Kafetsios, F. Anagnostopoulos, E. Lempesis, A. Valindra, Doctors' emotion regulation, communication skills and patient satisfaction: a social-functional perspective, Health Commun. 29 (2014) 205–214.
[8] J. Sitzia, N. Wood, Patient satisfaction: a review of issues and concepts, Soc. Sci. Med. 45 (1997) 1829–1843.
[9] S. Carmel, S.M. Glick, Compassionate-empathic physicians: personality traits and social-organizational factors that enhance or inhibit this behavior pattern, Soc. Sci. Med. 43 (1996) 1253–1261.
[10] P.J. Rosenfield, L. Jones, Striking a balance: training medical students to provide empathetic care, Med. Educ. 38 (2004) 927–933.
[11] J.L. Coulehan, P.C. Williams, Conflicting professional values in medical education, Camb. Q. Healthc. Ethics 12 (2003) 7–20.
[12] J. Halpern, From Detached Concern to Empathy: Humanizing Medical Practice, Oxford University Press, New York, NY, 2001.
[13] C.L. Bylund, G. Makoul, Emphatic communication and gender in the physician-patient encounter, Patient Educ. Couns. 48 (2002) 207–216.
[14] J. Fox, Notice how you feel: an alternative to detached concern among hospice volunteers, Qual. Health Res. 16 (2006) 944–961.
[15] J. Halpern, Empathy and patient–physician conflicts, Soc. General Internal Med. 22 (2007) 696–700.
[16] A. Finset, T.A. Mjaaland, The medical consultation viewed as a value chain: a neurobehavioral approach to emotion regulation in doctor-patient interaction, Patient Educ. Couns. 74 (2009) 323–330.
[17] A. Mark, Organizing emotions in health care, J. Health Organ Manage. 19 (2005) 277–289.
[18] J.J. Gross, Antecedent-and response-focused emotion regulation: divergent consequences for experience, expression, and physiology, J. Pers. Soc. Psychol. 74 (1998) 224–237.
[19] J.J. Gross, The emerging field of emotion regulation: an integrative review, Rev. General Psychol. 2 (1998) 271–299.
[20] J.J. Gross, O.P. John, Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being, J. Pers. Soc. Psychol. 85 (2003) 348–362.
[21] H.M. Finestone, D.B. Conter, Acting in medical practice, Lancet 344 (1994) 801–802.
[22] A. Brown, R. McMurtry, M. Karr, et al., Acting in medical practice, Lancet 344 (1994) 1436.
[23] A.R. Hochschild, The Managed Heart, University of California Press, Berkeley. CA, 1983.
[24] M. Groth, T. Hennig-Thurau, G. Walsh, Customer reactions to emotional labor: the roles of employee acting strategies and customer detection accuracy, Acad. Manage. J. 52 (2009) 958–974.
[25] M. Franciosi, F. Pellegrini, G. De Berardis, et al., Correlates of satisfaction for the relationship with their physician in type 2 diabetic patient, Diabetes Res. Clin. Pract. 66 (2004) 277–286.
[26] B.A. Gutek, The Dynamics of Service: Reflections on the Changing Nature of Customer/Provider Interactions, Jossey-Bass, San Francisco, CA,US, 1995.
[27] K.L. Wang, M. Groth, Buffering the negative effects of employee surface acting: the moderating role of employee-customer relationship strength and personalized services, J. Appl. Psychol. 99 (2014) 341–350.
[28] A.A. Grandey, When the show must go on: surface and deep acting as determinants of emotional exhaustion and peer-rated service delivery, Acad. Manage. J. 46 (2003) 86–96.
[29] J.M. Diefendorff, M.H. Croyle, R.H. Gosserand, The dimensionality and antecedents of emotional labor strategies, J. Vocat. Behav. 66 (2005) 339–357.
[30] W.S. Brown, T.A. Swartz, A gap analysis of professional service quality, J. Mark. 53 (1989) 92–98.
[31] E. Broadbent, C.J. Ellis, J. Thomas, et al., Further development of an illness perception intervention for myocardial infarction patients: a randomized controlled trial, J. Psychosom. Res. 67 (2009) 17–23.
[32] A.A. Grandey, G.M. Fisk, A.S. Mattila, et al., Is service with a smile enough: authenticity of positive displays during service encounters, Organ. Behav. Hum. Decis. Process. 96 (2005) 38–55.
[33] M.R. DiMatteo, L.S. Linn, B.L. Chang, D.W. Cope, Affect and neutrality in physician behavior: a study of patients' values and satisfaction, J. Behav. Med. 8 (1985) 397–409.
[34] B.E. Ashforth, R.H. Humphrey, Emotional labor in service roles: the influence of identity, Acad. Manage. Rev. 18 (1993) 88–115.
[35] A.S. Wharton, The affective consequences of service work: managing emotions on the job, Work Occupations 20 (1993) 205–232.
[36] D. Zapf, Emotion work and psychological well-being: a review of the literature and some conceptual considerations, Hum. Resour. Manage. Rev. 12 (2002) 237–268.
[37] P.M. Podsakoff, S.B. MacKenzie, J.Y. Lee, et al., Common method biases in behavioral research: a critical review of the literature and recommended remedies, J. Appl. Psychol. 88 (2003) 879.
[38] P. Argentero, B. DellOlivo, M.S. Ferretti, Staff burnout and patient satisfaction with the quality of dialysis care, Am. J. Kidney Dis. 51 (2008) 80–92.
[39] M.B. Shah, J.P. Bentley, D.J. McCaffrey, Evaluations of care by adults following a denial of an advertisement-related prescription drug request: the role of expectations, symptom severity, and physician communication style, Soc. Sci. Med. 62 (2006) 888–899.