Published in final edited form as:

Health Commun. 2016 December ; 31(12): 1566–1572. doi:10.1080/10410236.2015.1052872.

Patient involvement: A new source of stress in healthcare work?

Judith E. Arnetz, PhD, MPH, PT,

Wayne State University School of Medicine and Institute for Environmental Health Sciences,
Detroit, Michigan and Uppsala University, Uppsala, Sweden

Ludmila Zhdanova, PhD, and

Booth University College, Winnipeg, Manitoba, Canada

Bengt B. Arnetz, MD, PhD, MPH

Wayne State University School of Medicine and Institute for Environmental Health Sciences,
Detroit, Michigan and Uppsala University, Uppsala, Sweden

Abstract

Patients have become increasingly well-informed with higher expectations to be involved in decision-making processes regarding their care and treatment. However, few studies have examined the impact of patient involvement on health care providers' partnership-building communication. The aim of this study was to measure and explore the self-reported effects of patient involvement on the work of physicians and nurses. A questionnaire survey was distributed among cardiology staff in 12 Swedish hospitals (N=488, response rate 67%). The sample was comprised of registered nurses (RNs, n=303), licensed practical nurses (LPNs, n=132) and physicians (MDs, n=53). Confirmatory factor analysis was used to examine 7 questionnaire statements concerning implications of patient involvement for one's clinical work. Regression analyses were used to examine factors associated with staff's partnership-building communication. Analysis confirmed two distinct factors accounting for 57% of the total variance, representing both negative – "Hassles" – and positive – "Uplifts" – aspects of patient involvement. Regression analyses revealed that only positive aspects (i.e., uplifts) of patient involvement predicted staff behavior aimed at involving patients. Working with actively involved patients may be a source of stress, both negative and positive, for health care professionals. By developing work routines for involving patients in their care, health care workplaces may help health care professionals to buffer the negative effects, and enhance the positive effects, of that stress.

Keywords

stress; uplifts; hindrances; health care

Patients today are increasingly well-informed, demanding, and actively involved in discussions regarding their medical care (Longtin et al., 2010). At the same time, health care professionals are increasingly expected to promote patient participation in care and

treatment (Epstein & Street, 2011a). These developments imply changes for health care professionals in their interactions with patients, not least of which are demands for improved communication skills that facilitate patient-centered care (Levinson, Lesser, & Epstein, 2010). Physicians and other healthcare providers also face growing demands to increase their productivity, a major source of stress (Linzer et al., 2002). How, then, do healthcare providers perceive patient-centered care? Does providing care for an actively involved patient enhance the quality of care and one's work satisfaction? Or is it an additional source of work stress? To date, few studies have examined the impact of patient involvement on the work of health care professionals. A better understanding of health care professionals' perceptions of patient involvement is critical to the development and optimization of patient-centered care.

Review of Literature

Active patient involvement has been linked to higher quality health care and patient satisfaction (Arnetz, Almin, Bergstrom, Franzen, & Nilsson, 2004; Coulter, 2012) and better patient self-care and disease management (Bodenheimer, Lorig, Holman, & Grumbach, 2002). Patient-centered care requires healthcare practitioners to strive to meet patients' needs and to establish a partnership with them, encouraging their active participation in all clinical decisions, which entails modifications to traditional interaction and communication between healthcare providers and patients (Epstein, Fiscella, Lesser, & Stange, 2010; Levinson et al., 2010). This interactional approach has been termed "shared mind," which implies that caregiver and patient share ideas, perspectives, and intentions in the process of care (Epstein and Street, 2011b).

Previous studies that examined healthcare workers' views of and practices related to patient-centered care, reported multiple barriers to involving patients, including time constraints, patient characteristics, providers' reluctance to relinquish control, and providers' lack of communication skills (e.g., Legare, Ratte, Gravel, & Graham, 2008; Longtin et al, 2010; Levinson et al., 2010). Thus, there is growing recognition of the need for attitudinal and organizational changes to accommodate patient involvement practices (Epstein et al., 2010; Gulbrandsen, 2014). However, few studies to date have asked healthcare providers in what ways patient-centered practices affect their work.

Conceptual Framework: Work Stress and Provider-Patient Communication

Williams, Savage, and Linzer (2006) presented a heuristic framework that identified physician stress as a central factor in provider-patient interaction and ultimately in the quality of care. They described a cyclical model that can be either positive or negative, depending on the quality of the medical encounter. When physician stress is managed well, the quality of the medical encounter is good, leading to patient satisfaction and compliance. Thus, the physician is more likely to perceive interactions with patients and patient involvement as fulfilling and rewarding. When stress is poorly managed by the provider, the quality of interactions with the patient and patient-centered communication is negatively affected (Passalacqua & Segrin, 2012). This might result in dissatisfied patients who increase their demands on the provider as a way of reciprocating for the stressed, burned out

physician's detached communication (Bakker, Schaufeli, Sixma, Bosved, & Van Dierendonck, 2000). In this cycle, interactions with patients are more likely to be perceived by a physician as demanding and stressful. Within the partnership paradigm (Bodenheimer et al., 2002), we posit that interactions with patients and patients' desire to be involved, should be the focal point for research; specifically, measuring and understanding providers' perspectives on patient involvement can provide critical insights on provider-patient communication (Arnetz, Höglund, Arnetz, & Winblad, 2008a).

Hassles, Uplifts, and Patient Involvement

Based on this prior research, it is possible that patient involvement may be perceived as stressful and increasing workload for healthcare providers; it is also possible it may be perceived as fulfilling and rewarding. This perspective is consistent with that of occupational health researchers, who differentiate between positive and negative stress at work (e.g., Hart, Wearing, & Headey, 1994). Negative stress is associated with constraining job experiences and positive stress is associated with challenging but rewarding work (Boswell, Olson-Buchanan, & LePine, 2004). If actively involving patients is perceived as increasing work load and imposing time constraints, it constitutes a form of negative stress. At the same time, actively involving patients in their care through partnership-building communication might be perceived by providers as fulfilling, a form of positive stress (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). In the stress literature, emotional negative events and experiences that can be perceived as irritating or frustrating are referred to as *hassles* and have been linked to job dissatisfaction; whereas positive events and experiences that can be perceived as beneficial are referred to as *uplifts* and considered to be stress buffers (Ashkanasy, Zerbe, & Hartel, 2005; Kanner, Coyne, Schaefer, & Lazarus, 1981). This underscores the importance of examining both positive and negative events and experiences in a workplace and their effects on employee well-being in stressful situations (Hart et al., 1994).

Partnership-building Communication

Patient-centered care requires effective partnership-building communication (Ulrey & Amason, 2001). As mentioned previously, healthcare providers may find involving patients stressful because it forces them to deviate from their usual routines (Ulrey & Amason, 2001). Thus, it is possible that perceived hassles associated with patient involvement might diminish staff's ability or willingness to engage in communication aimed at encouraging patient involvement. Conversely, aspects of patient involvement perceived by providers as uplifts could create a 'positive spiral' that encourages staff's engagement in partnership-building communication (Fredrickson, 1998). We posit that it is necessary to measure these positive and negative perceptions and examine to what degree they influence partnership-building communication with patients. Partnership-building includes providers' communication of information regarding the patient's illness and course of treatment; recommendations and guidance regarding patient activities and lifestyle; responsiveness to patient needs and questions; and ability to help patients make decisions about their care and course of treatment. These previously-validated constructs (Arnetz et al., 2008a) may be

influenced by providers' perceptions of the hassles and uplifts aspects of patient involvement.

The Current Study

The current study measured and examined health care providers' perceptions of the effects of patient involvement on their work. The aims of this study were (1) to confirm a hypothesized two-factor structure corresponding to negative (hassles) and positive (uplifts) aspects of the perceived effects of patient involvement on the work of physicians and nurses; (2) to examine the differences in health care provider perceptions of hassles and uplifts and (3) to examine the relationship between positive and negative perceptions of patient involvement and physicians' and nurses' partnership-building communication with patients. We hypothesized that physicians and nurses perceive both positive (uplifts) and negative (hassles) influences of patient involvement on their clinical work. In previous research, Arnetz and colleagues reported that both physicians and nurses gave high ratings to the importance of involving patients in decisions regarding treatment (Arnetz, Winblad, Arnetz & Höglund, 2008b). It is therefore possible that rewards and uplifts associated with involved patients outweigh the negative stressors of the involvement process. Thus, we hypothesized that uplifts are more important predictors of partnership-building communication than hassles. Furthermore, based on the Williams and colleagues (2007) framework, we hypothesized that both positive and negative perceptions predict health care providers' partnership-building communication with patients.

Method

Participants

The study sample was comprised of cardiology staff working with myocardial infarction patients (N = 488) in twelve Swedish hospitals. The majority (84%) of respondents were female (n=402) and 40 years of age or older (n=272; 56%). Fifty six percent of the sample had worked more than six years in the current work place (n=273), while 47% indicated being employed in the profession for over 16 years (n=229). The largest group of participants was registered nurses (RNs, n = 303), followed by licensed practical nurses (LPNs, n = 132), and physicians (MDs, n = 53). In Sweden, RNs complete a three-year university education, often complemented by additional specialization courses, such as in cardiology. LPNs have the equivalent of a high school education with a focus on nursing. The participating cardiology departments were part of the Swedish registry for the Secondary Prevention after Heart Intensive Care Admissions (SEPHIA). All of the 32 SEPHIA cardiology departments were invited to participate; 12 units agreed (35% unit-level response rate). Non-participating departments indicated lack of time and/or resources as a reason for declining.

Procedure

A questionnaire survey was conducted in 2005 among cardiology staff working with acute myocardial infarction (MI) patients in the twelve Swedish hospitals. The aim of the survey was to measure perceptions and partnership-building communication regarding patient

involvement. Questionnaires were mailed out to each of the twelve participating cardiology units (one per hospital), where they were distributed to staff by a project liaison appointed by each unit. Project liaisons informed the research team of the total number of physicians and nursing staff on their respective wards; they were also responsible for reporting the total number of questionnaires that they distributed. Questionnaires were distributed over a two-week period to all physicians and nursing staff who worked with MI patients on a routine basis; on-call and emergency room physicians were therefore excluded. Each individual received a postage-paid envelope for returning the completed questionnaire to the research team. Thus, no one on the ward was aware of whether or how the participants responded. Questionnaire responses were anonymous and no reminders were sent. A total of 733 questionnaires were distributed and 488 were returned, resulting in a 67% response rate.

Questionnaire

The 57-item questionnaire was developed by the research team for the study and has been previously validated (Arnetz et al., 2008a). It is comprised of six subscales measuring staff perceptions of patient involvement and partnership-building communication.

Measures

Hassles and Uplifts—Seven questionnaire items asked respondents about the possible implications of patient involvement for one's clinical work. Participants were instructed to express their level of agreement on a 4 point scale (1=*strongly disagree*, 4=*strongly agree*). We hypothesized that four items would correspond to a *Hassles* dimension: An involved patient “makes demands that can create problems for me in my work;” “takes my time away from other patients;” “can make medically incorrect decisions;” and “increases my workload.” We also hypothesized that the remaining three items would reflect *Uplifts*, i.e., more positive effects of patient involvement: an involved patient “enriches my work;” “leads to improved compliance;” and “is a prerequisite for successful treatment.” Scores for the Hassles items were reversed, so that higher scores indicate more positive ratings, i.e., fewer hassles. For a final dimension score, the appropriate items were summed and transformed to percentages. Thus, final scores on the hassles and uplifts dimensions could range from 0 to 100%.

Partnership-Building Communication—Four dimensions of health professionals' partnership-building communication with patients were measured using 21 items from the aforementioned questionnaire. The factor structure and psychometric quality of these dimensions have been demonstrated previously. The four dimensions with their component items are summarized in Table 1. The *Information* dimension pertains to the amount and type of information nurses and physicians provide to their patients. The *Patient Needs* dimension measures responsiveness to patients' needs. *Activity* inquires about the extent to which appropriate daily activities after hospital discharge were discussed. *Motivation* measures to what extent nurses and physicians motivate their patients regarding treatment and lifestyle changes. For all of these dimensions, participants responded on a four-point Likert-type scale (1 = *Not at all*; 4 = *To a very great degree*). Scores on all dimensions were created by summing appropriate items and transposing sums into percentages. Thus, final

scores ranged from 0 to 100 percent. Higher scores always indicated higher levels of partnership-building communication.

Statistical Analyses

To confirm the hypothesized two-factor structure, corresponding to hassles and uplifts, we conducted confirmatory factor analysis with LISREL 8.8 and maximum likelihood estimation (Joreskog & Sorbom, 2006). The covariance structure was analyzed with scale set using the disturbance term of latent variables. Acceptable fit was indicated by the Root Mean Square Residual (RMSEA; Browne & Cudeck, 1993) and the Standardized Root Mean Square Residual (SRMR; McDonald & Ho, 2000) at or below .08, and the Nonnormed Fit Index (NNFI; Bentler & Bonett, 1980) with the Comparative Fit Index (CFI; Bentler, 1990) values above .85. Within-subject Analysis of Variance (ANOVA) was conducted to examine differences in health care providers' perceptions of hassles and uplifts. To examine the relationships of positive and negative perceptions of patient involvement with staff partnership-building communication, we examined bivariate correlations and performed hierarchical multiple regression analyses with uplifts and hassles as predictors and each respective communication dimension – Information, Patient Needs, Activities, and Motivation – as criterion measures. To control for the different extent in partnership-building communication across professional groups (Arnetz et al., 2008a), we included two vectors as control variables in the first step of each regression: vector 1 contrasted physicians with LPNs and vector 2 contrasted physicians with RNs. Hassles and uplifts were entered into the regression equation simultaneously as a second block of predictors.

Results

The results of the confirmatory factor analysis provided support for the hypothesized two-factor structure of hassles and uplifts. While the RMSEA value of .10 (90% confidence interval: .084; .200) was above the accepted cut-off value, an excellent fit was concluded according to the rest of the indices: NNFI=.87, CFI=.92, and SRMR=.08. Item loadings were significant at $p < .001$, and ranged for each dimension as follows: Hassles (.46–.57) and Uplifts (.12–.48). As expected, the two latent constructs were negatively correlated ($r = -.34$, $p < .001$). The adequacy of the hypothesized model was also determined by comparison to the alternative one-factor structural model via examining changes in CFI associated with a one-factor model, with decreases greater than .01 indicating a worse fitting model (Cheung & Rensvold, 2000). The alternative one factor model showed poorer fit in contrast to the hypothesized model (CFI=.19).

The test of within-subjects effects revealed a significant main effect of Hassles and Uplifts ($F(1, 449) = 239.26$, $p < .001$). Mean percentage scores on the Uplifts dimension were significantly higher ($M = 83.75\%$, $SD = 15.43$) than on the Hassles dimensions ($M = 63.88\%$, $SD = 17.88$). As evident from Table 2, perceptions of Hassles were moderately correlated with perceptions of Uplifts ($r = .23$). At the bivariate level, both Hassles and Uplifts were significantly correlated with all four examined communication dimensions; the exception was a non-significant relationship between Hassles and Information. Results for the hierarchical multiple regression analyses are summarized in Table 4. Uplifts predicted three

types of partnership-building communication, even after controlling for professional group differences: Information ($R^2 = .29$, $p < .001$), Patient Needs ($R^2 = .13$, $p < .001$), and Motivation ($R^2 = .45$, $p < .001$). In all cases, Hassles remained a non-significant predictor.

Discussion

The purpose of this study was to examine whether patient involvement is perceived by physicians and nurses to have both negative and positive aspects, to compare differences in these two aspects, and to explore the relationship of these perceptions with the partnership-building communication of cardiology staff. Results revealed that cardiology staff's perceptions of the effects of patient involvement on clinical work were summarized in two factors, one negative and one positive. These are similar to the concepts of hassles/hindrances (negative emotional events) and uplifts (positive emotional events) that have been used to describe the stress of professionals in, for example, police work (Hart et al., 1994). This supports our first hypothesis that working with actively involved patients may be a source of both negative and positive stress for health care professionals. In comparing differences between the two dimensions, we found that mean scores for the uplifts factor (83.75) were substantially higher than those for hassles (63.88). The four-point response alternatives for all 7 items did not provide an option for selecting "not sure," or "it depends." This indicates that questionnaire respondents generally tended towards a more positive view of patient involvement.

Results did not support our hypothesis, that both uplifts and hassles predict staff behaviors. While both types of stress were significantly associated with communication dimensions at the bivariate level, when considered together, only positive factors (i.e., uplifts) had a unique effect on partnership-building communication. Our final hypothesis, that uplifts would be more important predictors than hassles, was therefore supported. However, we had also expected hassles to be significant predictors, and this was not the case. Thus, it appears that negative perceptions of working with involved patients have no bearing on staff communication when positive aspects of involved patients are taken into account.

In the physician-patient cycle model proposed by Williams and colleagues (2006), it is suggested that patients become more demanding when physicians are stressed and don't communicate well in the medical encounter. Their model suggests that as patient demands increase, so does physician stress. Thus, poor communication skills on the part of the physician can create a continuously negative cycle of patient-provider interaction. The current study did not directly measure work stress; however, scores for the hassles dimension – a measure of the negative stress associated with patient involvement – were significantly lower than scores for the uplifts, or positive stress, measure. Moreover, only uplifts, not hassles, were significant predictors of partnership-building communication domains. These results suggest that doctors and nurses on these cardiology units were more inclined to see active patient involvement as a positive aspect of their work, and this had a positive impact on their partnership-building communication.

Previous research has suggested that healthcare providers may, indeed be stressed by the need to engage in partnership-building communication. In primary care, involving patients

in shared decision-making has been considered not only time-consuming, but also as a threat to physician power and credibility. Moreover, healthcare providers may lack the necessary skills required to fully engage patients in discussions of their care and self-management (Gulbrandsen, 2014; Legare, et al., 2008). Cardiology personnel involved in treating patients with myocardial infarction (MI) are especially faced with challenges when involving patients in decision processes. Specifically, nurses and physicians are bound by time pressures working with patients that are in pain, anxious, under medication, or even sedated (Arnetz et al., 2008b). At the same time, there is evidence suggesting that involving MI patients in their care during hospitalization has a positive effect on health outcomes 3 months post-discharge (Arnetz et al., 2010).

Based on the results of the current study, it seems that health care managers should strive to create a clinical work environment that encourages staff's partnership-building communication with patients. While learning new forms of communication may be stressful, the ability to master such skills may ultimately help to reduce that stress. This applies to health care providers in any environment, and is especially important in care encounters when providers and patients have culturally diverse backgrounds (Ulrey & Amason, 2001). One possible intervention would be educational seminars aimed at training physicians and nurses in communication techniques that facilitate more active patient involvement in clinical encounters and decision-making. From an organizational perspective, cardiology wards should review and, if necessary revise their clinical routines so that care providers have sufficient time to spend with each patient. This should diminish perceptions of "taking time away from other patients" when working with patients who wish to be more involved in discussions and processes concerning their care. Sufficient time, combined with appropriate communication skills, should also motivate providers to encourage greater patient involvement. While results also indicated that hassles associated with patient involvement do not have a unique effect on specific involvement-facilitating behaviors, future studies should examine other potential harmful outcomes of hassles. For example, hassles might be associated with decreased job satisfaction, job burnout, turn-over, or work-family conflict (Johansson, Eklund, & Erlandsson, 2012).

Limitations

There are a number of limitations that need to be mentioned. First, the study design was cross-sectional and causal relationships between staff perceptions of patient involvement and staff partnership-building communication cannot be determined. Secondly, all professional groups (MDs, RNs, and LPNs) were asked to respond to the same questions, although each of the three professional groups has distinctly different professional roles in their dealings with MI patients. Third, the study was conducted in Sweden, and provider perceptions of patient involvement may not be generalizable to providers in other countries. Fourth, the findings relate to cardiology care, specifically MI care, and may not be generalizable to other medical specialties. Finally, the data from this study are from 2005 and it is not known whether Swedish cardiology staff's perceptions of patient involvement would have changed over the years. Sweden's health care law has mandated since 1996 that health care personnel should work to involve patients in their care. These regulations were reinforced in 2005 (The National Board of Health and Welfare, 2014), although there have been no specific

regulations geared towards cardiology units, per se. Thus, patient involvement is very much a part of the Swedish health care culture. However, with an increasing focus on patient-centered and value-based care, the importance of patient involvement and its effects on staff communication and well-being are likely to be ever more important today.

Conclusions

To our knowledge, this is one of the first studies to identify positive and negative stress associated with healthcare providers' perceptions of patient involvement. Importantly, only positive stress perceptions of patient involvement were associated with healthcare professionals' partnership-building communication. By developing a ward culture and work routines for involving patients in their care, health care workplaces may help health care professionals to buffer the negative effects, and enhance the positive effects, of that stress. Future research should examine the effectiveness of educational interventions that focus on encouraging the perception that involved patients can enrich physician and nursing work, as well as patient outcomes.

Acknowledgments

This sample has been previously used to examine the psychometric properties of Staff Views and Behaviour Regarding Patient Involvement questionnaire and results were published in empirical journal. The data collection has been approved by the regional ethics committee in Uppsala, Sweden (dossier no. 03/289) and by the Human Investigation Committee at Wayne State University (HIC #100707MP2X). Funding for this project was provided by The Swedish Association of Local Authorities and Regions (SALAR), The Swedish Heart-Lung Foundation, The Swedish Heart and Lung Association, Swedish Skandia Life (publ) Group, and NIEHS grant P30 ES020957.

References

- Arnetz JE, Almin I, Bergstrom K, Franzen Y, Nilsson H. Active patient involvement in the establishment of physical therapy goals: Effects on treatment outcome and quality of care. *Advances in Physiotherapy*. 2004; 6:50–69.
- Arnetz JE, Höglund AT, Arnetz BB, Winblad U. Staff views and behaviour regarding patient involvement in myocardial infarction care: Development and evaluation of a questionnaire. *European Journal of Cardiovascular Nursing*. 2008a; 7:35.
- Arnetz JE, Winblad U, Arnetz BB, Höglund AT. Physicians' and nurses' perceptions of patient involvement in myocardial infarction care. *European Journal of Cardiovascular Nursing*. 2008b; 7:113–120. [PubMed: 17581793]
- Arnetz JE, Winblad U, Höglund AT, Lindahl B, Spangberg, Arnetz BB. Is patient involvement during hospitalization for acute myocardial infarction associated with post-discharge treatment outcome? An exploratory study. *Health Expectations*. 2010; 13:298–311. [PubMed: 20579120]
- Ashkanasy, NM.; Zerbe, WJ.; Hartel, CEJ. A bounded emotionality perspective on the individual in the organization. In: Hartel, CEJ.; Zerbe, WJ.; Ashkanasy, NM., editors. *Emotions in organizational behavior*. Mahwah, New Jersey: Lawrence Erlbaum Associates; 2005. p. 113–115.
- Bakker AB, Schaufeli WB, Sixma HJ, Bosveld W, Van Dierendonck D. Patient demands, lack of reciprocity, and burnout: A five-year longitudinal study among general practitioners. *Journal of Organizational Behavior*. 2000; 21:425–441.
- Bentler PM. Comparative fit indices in structural modeling. *Psychological Bulletin*. 1990; 107:238–246. [PubMed: 2320703]
- Bentler PM, Bonett DG. Significance test and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin*. 1980; 88:588–606.
- Bodenheimer T, Lorig K, Holman H, Grumbach K. Patient self-management of chronic disease in primary care. *JAMA*. 2002; 288:2469–2475. [PubMed: 12435261]

- Boswell WR, Olson-Buchanan JB, LePine MA. Relations between stress and work outcomes: The role of felt challenge, job control, and psychological strain. *Journal of Vocational Behavior*. 2004; 64:165–181.
- Browne, MW.; Cudeck, R. Alternative ways of assessing model fit. In: Bollen, KA.; Long, JC., editors. *Testing structural equation models*. Newbury Park: CA: Sage; 1993. p. 136-162.
- Cavanaugh MA, Boswell W, Roehling MV, Boudreau JW. An empirical examination of self-reported stress among U.S. managers. *Journal of Applied Psychology*. 2000; 85:65–74. [PubMed: 10740957]
- Cheung GW, Rensvold RB. Assessing extreme and acquiescence response sets in cross cultural research using structural equation modeling. *Journal of Cross-Cultural Psychology*. 2000; 31:187–212.
- Coulter A. Patient engagement – What works? *Journal of Ambulatory Care Management*. 2012; 35(2): 80–89. [PubMed: 22415281]
- Epstein RM, Fiscella K, Lesser CS, Stange KC. Why the nation needs a policy push on patient-centered health care. *Health Affairs (Millwood)*. 2010; 29:1489–1495.
- Epstein RM, Street RL. The values and value of patient-centered care. *Annals of Family Medicine*. 2011a; 9:100–103. [PubMed: 21403134]
- Epstein RM, Street RL. Shared mind: communication, decision making, and autonomy in serious illness. *Annals of family medicine*. 2011b; 9(5):454–461. [PubMed: 21911765]
- Fredrickson BL. What good are positive emotions? Review of General Psychology: Special Issue. *New Directions in Research on Emotion*. 1998; 2:300–319.
- Gulbrandsen P. What's in shared decision-making for the physician? *Patient Education and Counseling*. 2014; 97:145–146. [PubMed: 25236156]
- Hart PM, Wearing AJ, Headey B. Perceived quality of life, personality and work experiences: Construct validation of the Police Daily Hassles and Uplifts Scales. *Journal of Criminal Justice and Behavior*. 1994; 21:283–311.
- Hartel, CEJ.; Hsu, A.; Boyle, M. A conceptual examination of the causal sequences of emotional labor, emotional dissonance and emotional exhaustion: the argument for the role of contextual and provider characteristics. In: Ashkanasy, NM.; Zerbe, W.; Härtel, CEJ., editors. *Managing emotions in the workplace*. Armonk, NY: M.E. Sharpe; 2002. p. 279-296.
- Johansson G, Eklund M, Erlandsson L. Everyday hassles and uplifts among women on long-term sick-leave due to stress-related disorders. *Scandinavian Journal of Occupational Therapy*. 2012; 19:239–248. [PubMed: 21554178]
- Joreskog, KG.; Sorbom, D. LISREL 8.80. Lincolnwood, IL: Scientific Software International; 2006.
- Kanner AD, Coyne JC, Schaefer C, Lazarus RS. Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioural Medicine*. 1981; 4:1–39. doi.org/10.1007/BF00844845.
- Legare F, Ratte S, Gravel K, Graham ID. Barriers and facilitators to implementing shared decision-making in clinical practice: Update of a systematic review of health professionals' perceptions. *Patient Education and Counseling*. 2008; 73:526–535. [PubMed: 18752915]
- Levinson W, Lesser CS, Epstein RM. Developing physician communication skills for patient-centered care. *Health Affairs*. 2010; 29:1310–1318. [PubMed: 20606179]
- Linzer M, Gerrity M, Doubles JA, McMurray JE, Williams ES, Konrad TR. Physician stress: results from the physician worklife study. *Stress and Health*. 2002; 18:37–42. (2002).
- Longtin Y, Sax H, Leape LL, Sheridan SE, Donaldson L, Pittet D. Patient participation: Current knowledge and applicability to patient safety. *Mayo Clinic Proceedings*. 2010; 85:53–62. [PubMed: 20042562]
- McDonald RP, Ho MHR. Principles and practice in reporting structural equation analyses. *Psychological Methods*. 2000; 7:64. [PubMed: 11928891]
- Passalacqua SA, Segri C. The effect of resident physician stress, burnout, and empathy on patient-centered communication during the long-call shift. *Health Communication*. 2012; 27:449–456. [PubMed: 21970629]
- The National Board of Health and Welfare. Föreskrifter och allmänna råd, SOSFS [Regulations and general advice, in Swedish]. [Accessed October 11, 2014] <http://www.socialstyrelsen.se/sosfs>.

- Ulrey KL, Amason P. Intercultural communication between patients and health care providers; an exploration of intercultural communication effectiveness, cultural sensitivity, stress, and anxiety. *Health Communication*. 2001; 13:449–463. [PubMed: 11771806]
- Williams ES, Savage GT, Linzer M. Short communication: A proposed physician-patient cycle model. *Stress and Health*. 2006; 22:131–137.
- World Health Organization (WHO). A declaration on the promotion of patients' rights in Europe. http://www.who.int/genomics/public/eu_declaration1994.pdf

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 1

Partnership-Building Communication Dimensions with Component Items (Arnetz et al. 2008 a,b)

Scale and items (number of items)	
Information (5)	
To what degree do you usually inform the patient about:	
1	the patient's illness/condition and its course
2	why specific examinations/treatments are done
3	how examinations/treatments are done
4	possible pain/discomfort that can develop in conjunction with examinations/treatments
5	what occurred during the acute phase
Patient needs (4)	
To what degree do you usually ask whether the patient:	
1	has questions
2	has understood the information he/she has received
3	has special needs/requests
4	is worried about his/her illness/condition
Activity (6)	
To what degree do you usually discuss what the patient may and may not do with regard to the following activities:	
1	physical activity (for example heavy lifting)
2	driving
3	sexual activity
4	housework
5	gardening
6	return to work
Motivation (6)	
To what degree do you usually	
1	inform the patient about results from examinations/treatments
2	inform the patient about his/her medications
3	inform the patient about whom he/she can contact with questions after being discharged from the hospital
4	make decisions about care and treatment together with the patient
5	discuss lifestyle changes with the patient (for example, smoking cessation, exercise, diet, etc.)
6	try to motivate the patient to take responsibility for his/her future health

Table 2

Descriptive Statistics and Correlations for Study Variables (N = 488)

	Mean	SD	Profession	Profession(1)	Hassles	Uplifts	Information	Needs	Activities	Motivation
Profession ¹	--	--	--							
Profession(1) ²	--	--	-.78***	--						
Hassles	63.88	17.88	-.07	.08	.71					
Uplifts	83.75	15.43	-.13**	.16**	.23**	.67				
Information	15.87	3.29	-.50***	.44***	.09	.28***	.90			
Needs	71.62	20.49	-.17***	.22***	.16**	.29***	.61***	.86		
Activities	44.93	29.42	-.46***	.28***	.10*	.11*	.55***	.39***	.94	
Motivation	57.9	25.3	-.65***	.39***	.10*	.18***	.69***	.47***	.78***	.89

Notes.

* $p < .05$,

**

* $p < .001$,

p < .001.

¹ LPNs compared to physicians.² RNs compared to physicians.

Reliability coefficients are presented on a diagonal in bold.

Table 3
Multiple Regression Analysis with Partnership-Building Communication Measures

	R ²	B	SE B	β
Model 1: Information	.25 ***			
Profession <i>I</i>		−2.90 ***	.48	−.39
Profession(1) ²		.96 **	.43	.14
Model 2: Information	.29 ***			
Profession <i>I</i>		−2.93 ***	.46	−.39
Profession(1) ²		.72	.42	.11
Hassles		.00	.01	.00
Uplifts		.04 ***	.01	.20
Model 1: Patient Needs	.05 ***			
Profession <i>I</i>		−.77	3.38	−.02
Profession(1) ²		9.31 ***	3.04	.22
Model 2: Patient Needs	.13 ***			
Profession <i>I</i>		−.96	3.26	−.02
Profession(1) ²		7.31 *	2.95	.17
Hassles		.09	.05	.08
Uplifts		.32 ***	.06	.24
Model 1: Activities	.22 ***			
Profession <i>I</i>		−40.61 ***	4.44	−.60
Profession(1) ²		−12.72 ***	4.01	−.21
Model 2: Activities	.23 ***			
Profession <i>I</i>		−40.71 ***	4.43	−.61
Profession(1) ²		−13.65 ***	4.03	−.22
Hassles		.09	.07	.06
Uplifts		.11	.08	.06

	R ²	R ²	B	SE B	β
Model 1: Motivation	.43 ***				
Profession ¹			-48.82 ***	3.25	-.85
Profession(1) ²			-15.11 ***	2.92	-.29
Model 2: Motivation	.45 ***	.02 ***			
Profession ¹			-49.16 ***	3.2	-.85
Profession(1) ²			-16.57 ***	2.9	-.32
Hassles			.07	.05	.05
Uplifts			.21 ***	.06	.13

Notes.

* $p < .05$,

** $p < .001$,

*** $p < .001$.

¹LPNs compared to physicians.

²RNs compared to physicians.