FOCUS: PSYCHIATRY AND PSYCHOLOGY

Autonomy in the Obstetrician/Gynecologist-Patient Relationship as a Predictor of Patient Satisfaction

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A considerable amount of recent medical research focuses on factors involving patient satisfaction. This study attempts to examine the role of autonomy in the gynecologist-patient relationship as it relates to patient satisfaction. Fifty-five patients at a women's clinic completed measures assessing autonomy preference (API†) before the medical visit and patient-perceived autonomy support (HCCQ) and patient satisfaction (MISS) after the visit. Analyses revealed patients prefer a more equal level of decision making with their doctor (a medium level of autonomy) when asked general questions about medical decisions but preferred less autonomy when presented with actual scenarios. Results show a significant relationship between scenario-based autonomy preference level and visit satisfaction for both satisfaction measures. A significant relationship between perceived autonomy support and visit satisfaction was also found for both satisfaction measures. The findings of this study suggest autonomy is important to the gynecologist-patient relationship and worthy of future study.

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†Abbreviations: SDT, self-determination theory; API, Autonomy Preference Inventory; HCCQ, Health Care Climate Questionnaire; CSQ, Consultation Satisfaction Questionnaire; MISS-21, Medical Interview Satisfaction Scale – 21 item; OB-GYN, Obstetrician-Gynecologist.

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With great advancements in Internet accessibility and the widespread availability of health information, the practitioner-patient relationship has gradually evolved to a more patient-centered role. With increased exposure to information and advertisements about new drugs [1] and greater access to information about their symptoms, diagnoses, and even treatment options, the practitionerpatient relationship is changing to accommodate patients who feel they need a more active role in decisions. Kaba and Sooriakumaran [2] argue that over the past 20 years, the relationship has evolved from one in which the patient asks for help and complies with what the doctor instructs without question to one based on a "mutual participation," which calls for more patient education and involvement in medical decisions. As a result of this change in perspective, physicians may need to consider the needs and expectations of the patient while judging the proper way to make the patient feel in control of his or her own health. As such, the current research examines how preferences for deference to practitioner as well as autonomy supportive interactions predict satisfaction with visits.

PRACTITIONER-PATIENT RELATIONSHIPS

Practitioner-patient relationships may be similar to other types of interpersonal relationships (e.g., friendships) in that there may be a growth of intimacy or liking over time. Doctors and patients with long relationships may know many things about each other and converse as friends during the consultation. These relationships may also be maintained based on expectations, alternatives to the relationship, and satisfaction, just as the Interpersonal Model of Close Relationships [3] would argue.

However, the practitioner-patient relationship is different from other relationships in that the office consultation is typically the only form of interaction. In this relationship, the patient is also presumably only consulting with the doctor concerning his or her own health, not to see how the doctor is

doing or to just have a friendly conversation. Although much responsibility falls upon the physician to make sure the consultation goes smoothly (e.g., starting and guiding conversations about symptoms and treatments), the patient also has responsibilities in the interaction, namely presenting symptoms or answering questions posed by the doctor. Cegala, Coleman, and Turner [4] propose that medical consultations consist of four communication clusters: information seeking, information giving, information verification, and socio-emotional communication. Doctors seek information about the patients' symptoms while patients seek information about their conditions; conversely, patients give information about their symptoms and how they are affected, and doctors give information regarding the condition and various treatment options.

The methods of communication doctors choose to employ, whether adopting a more doctor-centered communication or a patientcentered method of communication, may affect how a patient perceives his or her doctor. Neo [5] argues that the best form of practitioner-patient communication involves two-way communication. This entails doctors asking open-ended questions and allowing for more patient input into medical treatment discussion and biopsychosocial content (i.e., the biological, psychological, and social factors responsible for illness), resulting in a more partnership-based practitioner-patient relationship. Neo [5] also states that practitioner-patient communication is severely limited when physicians fail to recognize psychological and social factors behind patients' reasons for consulting them. When proposing reasons for adopting the biopsychosocial model of diagnosis, Engel [6] states that along with the biological component of a patient's illness, doctors must also take into account a patient's social setting and his psychological well being. In addition, Smith [7] argues that integrating this model in the consultation allows for a more humanistic approach to treating patients, as opposed to treating patient symptoms merely as a biological malady that can be remedied chemically.

In studying the quality of psychosocial care, Bensing [8] had doctors rate videotapes of actual practitioner-patient interactions. Patients in the video also completed a measure of satisfaction after their visit. Results demonstrated that doctors who were rated high on psychosocial care, specifically the affective aspect of psychosocial care (e.g., nonverbal attentiveness, interest in patient), had more satisfied patients. Another study examining practitioner-patient relationships in diabetes patients found that a patient's liking of his or her doctor was positively related to visit satisfaction, positive ratings of the doctor's behavior, positive affect after the visit, and better self reports of health [9]. These studies suggest that more than just a doctor's medical knowledge and competence is important to maintaining quality practitioner-patient relationships.

However, the ideal of mutuality in the practitioner-patient relationship may be easier to aspire to than to achieve. Pilnick and Dingwall [10] argue the asymmetry of the relationship that appears throughout the literature examining the practitioner-patient relationship lies in the inherent nature of the unbalanced relationship itself, and doctorruled encounters are inescapable. They suggest that this asymmetric relationship should be accepted and the functional aspects of this uneven relationship expanded and improved upon in a constructive manner, allowing for the practitioner-patient relationship to move in a forward direction. Still, many others call for a more balanced practitioner-patient relationship in which the patients' needs and wants are taken into account whenever medical decisions are being made, evolving the practitioner-patient relationship into more of a mutual partnership [2,11].

SELF-DETERMINATION THEORY

Self-Determination Theory (SDT) [12,13] proposes that in order to feel satisfied, one must satisfy three basic, innate psychological needs: competence, relatedness, and autonomy. An approach to patient-centered care worth noting is patient autonomy as seen through SDT. Autonomy can be defined in SDT as a need to organize and control one's own behavior and act through volition regardless of extrinsic factors. It has been argued that when individuals are able to autonomously coordinate internal wishes and actions, they can more effectively maintain their own well-being [12].

Numerous studies have recognized the importance of environments that support autonomy for human growth and motivation and the impact of autonomy support across the human experience, including education, exercise, and relationships, to name a few. Autonomy supportive environments facilitate one's ability to choose and allow the person to explore information, rather than simply having choices made for them or tasks placed upon them with no input or explanation. For example, Grolnick and Ryan [14] examined the relationship between parental autonomy support and child competence in school. The researchers performed a structured interview with parents of a group of school children in grades three to six to measure the level of parental autonomy support provided and asked teachers to rate the level of children's competence in the classroom (e.g., academics, social adjustment, etc.). They also examined the children's grades and standardized test achievement scores. The results indicated that higher parental autonomy support was correlated with higher teacher-ratings of competence in the classroom, higher grades, and higher standardized test scores.

The role of autonomy has also been examined in the realm of health care and found to be extremely important [15]. Diabetes patients receiving care from a health care delivery system were recruited through the use of a mixed telephone-and-mail survey assessing a number of factors related to the SDT model of health behavior, including perceived autonomy support from health care providers, autonomous motivation for medication use, perceived competence for diabetes self-management, and patients' quality of life. They found that perceived autonomy support from health care providers related positively to autonomous motivation for medication use and that autonomous selfregulation for medication use related positively to perceived competence for diabetes self-management. Patient autonomy may play an important part in the practitioner-patient relationship. By providing education and choices for care, physicians may be able to strengthen their relationship with patients.

Lee and Lin [16] also examined the role of autonomy and patient satisfaction in diabetes patients. Conducted in Taiwan, patients provided information about their received autonomy at Time 1, preference for autonomy four months later (Time 2), and their satisfaction with their health care providers at Time 1 and Time 3 (12 months later). They found that both autonomy preference and autonomy received were significant positive predictors of patient satisfaction.

It is important to note that autonomy can be experienced in many ways [17]. Initially, it seems that autonomous medical decisions are those made by the patients themselves. However, one could also speculate that patients who choose to relinquish their role in deciding what actions to take in their health care are also acting autonomously and will be satisfied with that decision. Ende, Kazis, Ash, and Moskowitz [18] measured the level of autonomy patients prefer in general and level of autonomy preference during certain scenarios of increasing severity (e.g., when the patient has a cold vs. when the patient has a heart attack). They found that while patients preferred a certain level of autonomy in their relationship with doctors, they prefer less autonomy when different scenarios are presented, and their preference for autonomy lessens even more when the situations become more severe. Their findings suggest that while patients prefer autonomy in their relationship with their doctors, they would also like their doctors to still make a lot of decisions for their care, especially if the situation is very serious or life threatening. The current study hopes to expand upon the link between patient satisfaction, autonomy preference, and perceived autonomy support by looking at the relationship between a patient's preferences for autonomy and his or her perception of the autonomy actually received.

THE CURRENT STUDY

The purpose of the current study is to examine the practitioner-patient relationship as it relates to patient autonomy preference and perceived autonomy support. More specifically, we are interested in how both preferences for autonomy and perceived autonomy support received relate to patient satisfaction with the medical visit. We predict that 1) patient's autonomy preference level will have a significant relationship with visit satisfaction, and 2) perceived autonomy support will be significantly related with visit satisfaction as well. Further, we will examine whether the hypothesized link between autonomy preference and visit satisfaction is mediated by the perceived autonomy support received during the visit.

Although similar to Lee and Lin's [16] study, this study differs in two important ways. First, it examines patients without a known chronic medical condition like diabetes. The practitioner-patient relationship for patients who receive more consistent medical care may differ from those who do not, as they see them on a more regular basis. For example, the American Diabetes Association recommends visiting a doctor two to four times a year for most patients with diabetes [19]. The patients in the current sample still have what we would consider relationships with their caregivers but ones that are not necessarily defined by illness. Given that obstetrician-gynecologists (OB-GYNs) address medical concerns throughout the lifespan and the prescription that even healthy women visit them annually, these doctors have the opportunity to develop very close relationships as well that other practices do not. Considering the sensitive and personal nature of obstetric and gynecological consultations, OB-GYNs must take special care to consider the needs of their patients. It is for this reason that this specific practitioner-patient relationship was examined in the current study. In addition, Lee and Lin [16] examined autonomy received and satisfaction in general rather than in response to a particular visit, as the current study does.

METHOD

Participants

Participants were patients at an obstetricgynecological practice in the Jackson, Mississippi, area. The practice is a public office located in a suburban setting with multiple physicians working on a rotational schedule among other offices in the area affiliated with the same hospital. Participants were solicited by the office receptionist. Fifty-five female patients participated with a mean age of 41.25 (SD = 12.68). The reasons for the medical visit included annual checkup (n = 17), pregnancy-related checkup (n = 10), medical complaint (n = 11), and other (n = 17). Participants indicated which doctor they were seeing with a majority of participants reporting seeing this doctor for the first time (n =21) or for less than a year (n = 16).

Procedure

The study was carried out over 4 days at an obstetrics and gynecology office in Jackson, Mississippi, and approved by the Institutional Review Board at the University of Mississippi (Protocol #12-201). Patient participants were recruited in the waiting room of the office. Upon checking in, the receptionist asked if they would like to participate in a study examining the practitioner-patient relationship. No specific exclusion or inclusion criteria were given to the receptionist. If the patient agreed to participate, she was handed a survey packet and consent form to complete while waiting to be seen by her doctor. The participants were instructed to keep their questionnaire packet until after the visit. When checking out, the receptionist gave the participants a second set of questionnaires to fill out and asked them to turn in both questionnaires once they finished.

MEASURES

Pre-Visit Measures

Participants completed a demographic questionnaire asking for age, length of relationship with doctor, and the reason for their visit that day (e.g., annual checkup, medical complaint).

Patients then completed an adapted version of the Autonomy Preference Index (API), a validated measure used to gauge the amount of autonomy that patients desire in their medical consultations [18]. The original API contains two subscales — one designed to assess general patient autonomy preferences and one comprised of three scenarios with three questions each designed to assess patient autonomy preference during specific medical situations.

The general preference subscale consists of six global statements about medical decision making (e.g., "You should feel free to make decisions about everyday medical problems."). Participants rated their agreement with each statement on a five-point, Likert-type scale (1 = strongly disagree; 5 = strongly agree). In the current study, this scale was not altered and had an acceptable level of reliability ($\alpha = .70$).

The scenario decision-making section of the scale originally included three medical scenarios of increasing medical severity with three questions following about who should make treatment decisions. An example of an original scenario in this measure was, "Suppose you went to the doctor for a routine physical examination and he or she found that everything was all right except your blood pressure was high (170/100). Who should make the following decisions -When the next visit to check your blood pressure should be?" Responses were recorded on a five point scale (1 = me alone, 2 =mostly me, 3 = the doctor and me equally, 4 = mostly the doctor, 5 = the doctor alone) to three questions. To adapt this measure, we kept the blood pressure scenario and added a scenario that dealt specifically with an OB-GYN complaint: "Suppose you are experiencing vaginal itching and a slight discharge that has lasted for 3 days. You are about to call your doctor on the telephone. Who should make the following decisions?" An example decision-making item following this scenario was, "whether you should be seen by the doctor." The reliability for the revised scenario subscale was acceptable ($\alpha =$

					Range	
Measure	n	М	SD	α	Potential	Actual
API General	52	3.07	0.92	.77 .85	1-5	1.4-5.0
Scenario-based Overall	50 48	3.92 3.55	0.71 0.65	.85 .85	1-5 1-5	2.7-5.0 2.2-5.0
HCCQ	52	6.59	0.96	.96	1-7	1.3-7.0
CSQ	52	53.11	5.08	.92	8-56	32-56
MISS	53	58.25	6.74	.85	9-63	36-63

 Table 1. Psychometric Properties of Study Measures.

Note: The variation in sample size is due to exclusion of data from individual reports with unanswered items.

.85). As a reminder, higher scores on both autonomy preference measures indicate a belief that doctors should be more responsible for medical decision making.

Post-Visit Measures

After their visit, participants completed the Health Care Climate Questionnaire (HCCQ) [20], designed to measure the amount of perceived autonomy support the patient felt during the medical consultation. A sample item includes "I feel that my physician has provided me with choices and options." Agreement with each statement was indicated using a seven-point, Likerttype scale (1 = Strongly disagree, 4 = neutral, 7 = Strongly agree.). In the interest of brevity, the short form of the HCCQ, containing six items, was used and was found to be highly reliable ($\alpha = .96$).

Satisfaction with the visit was measured in two ways. In each case, participants rated their agreement with a series of statements using a seven-point Likert-type scale (1 = very strongly disagree, 4 = neutral, 7 = very strongly agree. First, satisfaction with the medical examination itself was measured using two items from the Professional Care factor of the Consultation Satisfaction Questionnaire (CSQ) [21]. Although the Professional Care factor is comprised of seven items, not all items would be applicable to each type of OB-GYN visit (e.g., related to a particular illness). As such, we used two statements that could apply to all visits: "The doctor was very careful to check everything when examining" and "The doctor examined me very thoroughly" ($\alpha = .89$). Second, satisfaction with the interpersonal aspects of the visit was measured with the eight-item Rapport subscale of the Medical Interview Satisfaction Scale — 21 item (MISS-21) [22]. Sample items include, "The doctor seemed interested in me as a person" and "I felt free to talk to this doctor about private matters" ($\alpha = .91$).

RESULTS

Descriptive statistics for each measure can be found in Table 1. The mean scores for general items, scenario-based items, and overall items on the API indicate an average preference for autonomy, meaning a preference for decisions being made jointly by doctors and patients. The mean scores for the HCCQ and the three measures of satisfaction, however, indicate that most participants perceived a high level of autonomy in their consultation and were also very satisfied with their visit. The general and scenario based items of the API were analyzed using a Pearson correlation analysis. It was found that these two variables were significantly related with a correlation coefficient of 0.54 (p < .001). A paired samples t-test was performed comparing the general and scenariobased components of the API. Results show that when considering general autonomy in the practitioner-patient relationship, patients

preferred a significantly lower level of autonomy when given scenario-based autonomy items than when asked about general autonomy preference. The average withinperson difference was -4.80 [t(47) = -7.73, p < .001]. A correlational analysis of the three measures of satisfaction revealed highly significant positive relationships between satisfaction with the exam itself and rapport (r = .75, p < .001).

To determine the relationship between patient autonomy preference and patient satisfaction with a medical consultation (Hypothesis 1), a correlational analysis of the general and scenario-based Autonomy Preference Index scores was performed separately with measures of rapport and satisfaction with the exam. The Pearson correlation coefficients for the analysis of the general autonomy preference scores for satisfaction were nonsignificant (p's > .37). However, the correlational analysis of scenario-based API scores with rapport (r = .39, p < .01) and exam satisfaction (r = .27, p = .06) revealed significant or marginally significant results. To help clarify the mixture of significant and marginal results, we created a composite score of satisfaction by averaging the scores from the two satisfaction scales (unweighted average). Correlation analyses revealed again that general API scores are not significantly associated with this overall satisfaction (r = .05, p = .75) but scenario-based API scores are a significant predictor (r = .35, p = .01). These findings suggest that although there is not a significant relationship between a patient's general preference for autonomy and satisfaction, the preferences for autonomy indicated by considering specific medical scenarios and patient satisfaction are associated.

In order to examine Hypothesis 2, a correlational analysis was performed on the scores for the Health Care Climate Questionnaire with the two satisfaction scales to assess the relationship between perceived autonomy support received during the visit and patient satisfaction. Pearson correlation coefficients for the HCCQ revealed significant associations with rapport (r = .42, p < .01) and exam satisfaction (r = .45, p = .001). HCCQ is also significantly related to the composite score described above (r = .45, p < .001). These results suggest that patients' perceived autonomy support is strongly associated with patient satisfaction.

A final set of analyses was run to examine the unique relationship between both scenario-based autonomy preference and perceived autonomy support and visit satisfaction. These analyses were done with both scales of satisfaction, as well as the composite score created from averaging the two scales. A linear regression using both scenario-based autonomy preference and perceived autonomy support to predict patient satisfaction was run, with both predictors entered into the model simultaneously. When examining the rapport, the entire model was significant [F(2, 45) = 8.25, p <.001, $R^2 = .27$]. Both perceived autonomy support ($\beta = .32$, p = .02) and autonomy preference ($\beta = .33$, p = .02) were unique predictors of patient satisfaction with the interpersonal aspects of the visit. We next used the same model to predict exam satisfaction. The entire model was significant [F(2, 44)] $= 5.86, p < .01, R^2 = .21$], however, we found that while autonomy support was significant $(\beta = .40, p < .01)$, autonomy preference was no longer a significant predictor ($\beta = .15, p$ = .30). However, mediation analyses did not reveal this to be a significant mediation (p =.11). Additionally, when predicting a composite satisfaction score that averages rapport and exam satisfaction, we found that autonomy support remains significant ($\beta =$.37, p < .01), but autonomy preference was reduced to marginal significance ($\beta = .25, p$ = .07), again this mediation is non-significant (p = .11).

DISCUSSION

The goal of this study was to examine autonomy in the gynecologist-patient relationship. First, the relationship between a patient's preference for autonomy and actual autonomy perceived during medical visits was examined. Second, this study was also designed to examine how patients' preferences beforehand and their perceptions during the visit predicted their overall satisfaction with their visit. Further, we considered both the satisfaction with visit more technically and the satisfaction with the interpersonal aspects of the visit. Results revealed that patient autonomy preference (based on evaluation of medical scenarios) predicts patient satisfaction and that perceived autonomy support predicts patient satisfaction as well.

In examining the first hypothesis, no significant relationship was found between general autonomy preference and visit satisfaction. However, a significant relationship does exist between scenario-based autonomy preference and satisfaction level. Further, participants' preferences for autonomy significantly differed from one another depending on the manner in which preferences were assessed (generally or scenario-based), supporting earlier work by Ende et al. [18].

The second hypothesis predicted that patients' perceived autonomy support would have a significant, positive relationship with visit satisfaction. This hypothesis was supported. Patients who felt more autonomy in their visits reported greater satisfaction with both the exam itself and with the rapport demonstrated by their doctors. These results support the general assertion proposed by Self-Determination Theory, that satisfaction of one's need for autonomy is associated with positive outcomes. In addition, in the prediction of the interpersonal aspects of the visit, both autonomy received and one's preference for autonomy were significant, unique predictors.

This may seem a bit contradictory in that satisfaction is associated with feeling autonomous yet also the desire to yield autonomy to one's doctor. This disconnect may provide support for Pilnick and Dingwall's [10] claim that the practitioner-patient relationship is inherently unbalanced despite claims to the contrary. Although patients may generally want to be the decision makers, the actual nature of medical situations lends itself to a greater deference to the doctor's authority. The findings of the current study not only indicate a difference in preference for autonomy, perhaps demonstrating

an acknowledgement by patients of this authority, but a link between this preference for deference and visit satisfaction. It is important to note again that rather than patients deferring or feeling pressured by doctors to let them make the decision, patients may desire to exercise their autonomy by allowing their doctors to make decisions. That is, it is possible that people valued interactions with practitioners who provided autonomy support, but also trusted the practitioners to ultimately make the correct decisions. However, we cannot definitively state that this is what happened, as our data cannot determine if patients actually yielded to practitioners, only that they reported a preference for doing so.

In addition, the findings of the current study contradict those of Lee and Lin [16], who found that wanting to be more in control of decisions was associated with more satisfaction (i.e., a positive relationship between the general measure of the API and satisfaction). There are several possibilities why our results differ from earlier research. One possibility is the different type of patients found in each study (general OB-GYN patients compared to diabetes patients). Another possibility may be the difference in data collection between the two studies. Our study focused on a specific visit, whereas Lee and Lin [16] examined general feelings toward medical visits. Finally, as discussed above, we noticed a difference in patient preferences for autonomy based on the version of the questionnaire given, and Lee and Lin [16] only considered the general preference scale. We feel this difference in findings is incredibly important, and we hope that future researchers will attempt to explain the difference in autonomy preferences in medical relationships.

IMPLICATIONS FOR CLINICAL PRACTICE

While this research is in an early stage, and more research is necessary before definitive impacts can be seen for practitionerpatient interactions, we still believe that our findings hold implications for clinical prac-

tice. Namely, our results point to the importance for practitioners to find a balance between their expertise and the client's autonomy. Our results suggest that it is important to patients that their practitioner be able to use their training and knowledge to ultimately make the final decision. However, our results also suggest that patients also appreciate being included in decisionmaking. As such, it is important that practitioners not simply make decisions without including patients in the decision-making process. As is clear in our findings, patients also liked visits more if practitioners supported their autonomy and choices. Additionally, while we focused exclusively on MDs in this study, we believe that the dynamics of the relationship being examined are not necessarily specific to MDs, as APRNs, CNMs, and PAs also provide primary and OB-GYN care in the outpatient setting.

LIMITATIONS AND FUTURE DIRECTIONS

It is interesting to note the relatively high scores for the Health Care Climate Questionnaire (HCCQ), the Consultation Satisfaction Questionnaire (CSQ), and the Medical Interview Satisfaction Scale (MISS). These results suggest there was a very high level of perceived autonomy support and satisfaction with the medical visit. Perhaps the more frustrated or unsatisfied participants did not choose to participate. However, given that no participants completed the pre-visit measures without completing the post-visit measures, it seems unlikely that those who would be more satisfied after their visit could have been identified as such before their visit.

Another concern is the recruitment of participants. As stated in methods, the receptionist simply stated there was a study going on involving the practitioner-patient relationship and asked if they would like to participate and was not provided any inclusion or exclusion criteria. It is unclear whether the receptionist was consistent in her recruitment efforts (e.g., all patients were solicited) or whether she approached patients in some more random fashion (e.g., asking patients only if she was familiar with them or only if they appeared to be in a good mood). Future research should attempt to be more systematic in its participant solicitation. Taken together with the single recruitment site, the extent to which the findings of the current study can be applied to different samples cannot fully be determined.

The Autonomy Preference Index should also be more closely examined in future studies. Currently, the scenario-based section for the Autonomy Preference Index only presents medical scenarios in which there is a problem, while the general autonomy questions poses medical problem questions along with checkup type items. As noted earlier, the two sections of this measure were differentially predictive of satisfaction. Perhaps the scenario-based section should be amended to include a medical situation that involves a checkup situation in which there are no problems in order to adequately assess how patients prefer autonomy in all types of medical situations and the progression of deferred autonomy throughout various degrees of health severity.

The current study also only considers the factor of patient satisfaction in the practitioner-patient relationship. Future studies should underscore the importance of other factors in relationships, such as relationship length, closeness, or trust. For example, length of relationship would be an important aspect of the practitioner-patient relationship to examine because it is logical to assume that patients who have been with a doctor for a long time are generally satisfied with their doctor or else they would have switched long ago. Examining satisfaction along with relationship length could clarify results.

Further studies examining the practitioner-patient relationship should also consider examining patients' wants and expectations. They may value certain traits in a doctor but may not expect their doctor to have these traits going into the consultation. In addition, different specialties of practice should also be examined to get a feel for practitioner-patient relationships as a whole. The expectations that one has for a general practioner may differ from those for doctors with more specialized practices (e.g., oncology). In addition, a focus on the type of patients seen may also provide valuable insight into role of autonomy in the practitioner-patient relationship. It is possible that patients with more chronic conditions, who see their physicians more regularly, or more educated patients may have different autonomy preferences.

The aim of the current study was to evaluate the significance of autonomy in the practitioner-patient relationship, and it was found that there is a relationship in some aspects. When considering autonomy preference and patient satisfaction with a consultation, it was found that scenariobased autonomy preference was predictive of patient satisfaction. It was also found that perceived autonomy support was positively related to visit satisfaction. Results of this study suggest that autonomy may play a significant role in the practitioner-patient relationship, and should continue to be explored.

REFERENCES

- Brownfield ED, Burnhardt JM, Williams MV, Parker RM. Direct-to-consumer drug advertisements on network television: An exploration of quality, frequency, and placement. J Health Commun. 2004;9(6):491-7.
- Kaba R, Sooriakumaran P. The evolution of the practitioner-patient relationship. Int J Surg. 2007;5(1):57-65.
- Rusbult CE. A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. Journal of Personality and Social Psychology. 1983;45(1):101-17.
- Cegala D, Coleman M, Turner J. The development and partial assessment of the medical communication competence scale. Health Commun. 1998;10(3):261-88.
- Neo LF. Working toward the best practitioner-patient communication. Singapore Med J. 2011;52(10):720-5.
- Engel GL. The need for a new medical model: A challenge for biomedicine. Family Systems Medicine. 1992;10(3):317-31.
- Smith RC. The biopsychosocial revolution. J Gen Intern Med. 2002;17(4):309-10.

- Bensing J. Doctor-patient communication and the quality of care. Soc Sci Med. 1991;32(11):1301-10.
- Hall JA, Horgan TG, Stein TS, Roter DL. Liking in the physician-patient relationship. Patient Educ Couns. 2002;48(1):69-77.
- Pilnick A, Dingwall R. On the remarkable persistence of asymmetry in doctor/patient interaction: A critical review. Soc Sci Med. 2011;72(8):1374-82.
- 11. Kim J, Kim S. Physicians' perception of the effects of Internet health information on the practitioner-patient relationship. Inform Health Soc Care. 2009;34(3):136-48.
- Deci EL, Ryan RM. Intrinsic motivation and self-determination in human behavior. New York: Plenum; 1985. 367 p.
- Deci EL, Ryan RM. The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry. 2000;11(4):227-68.
- Grolnick WS, Ryan RM. Parent styles associated with children's self-regulation and competence in school. Journal of Educational Psychology. 1989;81(2):143-54.
- Williams GC, Patrick H, Niemiec CP, Williams L, Divine G, Lafata J, et al. Reducing the health risks of diabetes: How self-determination theory may help improve medication adherence and quality of life. Diabetes Educ. 2009;35(3)484-92.
- Lee Y, Lin JL. Do patient autonomy preferences matter? Linking patient-centered care to patient-physician relationships and health outcomes. Soc Sci Med. 2010;71(10):1811-8.
- Williams GC, Deci EL. The importance of supporting autonomy in medical education. Ann Intern Med. 1998;129(4):303-8.
- Ende J, Kazis L, Ash A, Moskowitz M. Measuring patients' desire for autonomy: decision making and information-seeking preferences among medical patients. J Gen Intern Med. 1989;4(1):23-30.
- American Diabetes Association. Living with Diabetes: Future visits [Internet]. [cited 2012 Sept 12]. Available from: http://www.diabetes.org/living-with-diabetes/treatment-andcare/who-is-on-your-healthcare-team/futurevisits.html.
- Williams GC, Grow VM, Freedman ZR, Ryan RM, Deci EL. Motivational predictors of weight loss and weight-loss maintenance. J Pers Soc Psychol. 1996;70(1):115-26.
- Baker R. Development of a questionnaire to assess patients' satisfaction with consultations in general practice. Br J Gen Pract. 1990;40(341):487-90.
- Meakin R, Weinman J. The 'Medical Interview Satisfaction Scale' (MISS-21) adapted for British general practice. Fam Pract. 2002;19(3):257-63.