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What Factors are Associated with Consumer Initiation of Shared Decision Making in Mental Health Visits?

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Abstract

Understanding consumer initiation of shared decision making (SDM) is critical to improving SDM in mental health consultations, particularly because providers do not always invite consumer participation in treatment decisions. This study examined the association between consumer initiation of nine elements of SDM as measured by the SDM scale, and measures of consumer illness self-management and the consumer-provider relationship. In 63 mental health visits, three SDM elements were associated with self-management or relationship factors: discussion of consumer goals, treatment alternatives, and pros and cons of a decision. Limitations, implications, and future directions are discussed.

Keywords

shared decision making; communication; consumer-provider relationship

Introduction

Shared decision making (SDM) is a process in which consumers and providers work together as partners to make treatment decisions. SDM is considered an important component of high quality, consumer-centered health care (IOM, 2001)—particularly because it is consumers who ultimately have to live with both the positive and negative consequences of a chosen treatment (Drake & Deegan, 2009; Young, Bell, Epstein, Feldman, & Kravitz, 2008).

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Although consumers with mental illness frequently have the ability and desire to actively participate in their mental health treatment decisions (Adams, Drake, & Wolford, 2007; Hamann, Cohen, Leucht, Busch, & Kissling, 2005; Kukla, Salyers, & Lysaker, 2013; Park et al., 2014), achieving SDM can be challenging. Indeed, some studies indicate that the frequency of SDM is generally low, both in physical and mental health contexts (Braddock et al., 2008; de las Cuevas, Rivero-Santana, Perestelo-Perez, & Serrano-Aguilar, 2013; Goss et al., 2008; Salvers et al., 2012). In physical health, research indicates that patients often do not share questions and concerns with their providers, do not ask for information, and may be reluctant to voice their opinions because of pressure to conform to "traditional" patient roles or fear of being labeled "difficult" (Beisecker & Beisecker, 1990; Frosch, May, Rendle, Tietbohl, & Elwyn, 2012; Korsch, Gozzi, & Francis, 1968; Roter et al., 1997). Likewise, in mental health care, although research indicates that providers support SDM (Hamann et al., 2009; Seale, Chaplin, Lelliott, & Quirk, 2006), the inherent power dynamics at play can further serve as a disincentive to consumer involvement. For example, consumers who are strongly committed to their preferences or express skepticism about providers' recommendations may inadvertently create greater tension in the visit (Alegria et al., 2014; Hamann et al., 2012). These challenges can be exacerbated if consumers are experiencing lack of insight into their illness or symptom exacerbations (Karnieli-Miller & Salyers, 2010; Seale et al., 2006), or if providers question consumers' ability to evaluate and understand treatment options (Hamann et al., 2006).

The provider's role in creating an atmosphere where consumers feel comfortable participating in mental health treatment decisions is a critical part of SDM. However, this does not always happen (Hamann et al., 2009; Salyers et al., 2012; Salyers et al., 2009). In the absence of explicit provider invitations, consumers have a choice either to be passive, or to take the initiative to become more active in the visit. Active involvement can include a number of behaviors, such as being prepared for one's mental health visit, participating in the visit by asking questions and offering information, and understanding and adhering to one's treatment plan. With treatment decisions, an important indicator of consumer involvement is consumer initiation of SDM. However, the role of consumer initiation of SDM is not well-studied or understood—a notable knowledge gap in a consumer-directed, recovery-oriented model of mental health care, which explicitly values active consumer participation.

Until the consumer's role in SDM is better understood, implementation of SDM in clinical settings will continue to be challenging. Specifically, little is known about how often and under what circumstances consumers initiate SDM. Some literature indicates that features of the consumer-provider relationship can exert an important influence on SDM (Matthias, Salyers, & Frankel, 2013). For example, the length of time consumers and providers have been working together, degree of mutual liking and trust, and shared goals are all factors relevant to the relationship that have the potential to lay a strong foundation for SDM (Klingaman et al., 2015). This may be especially true in the management of long-term conditions, where consumers and providers have an ongoing relationship, see each other regularly, and which require active self-management (Matthias et al., 2013; Montori, Gafni, & Charles, 2006). Further, consumers who possess knowledge, skills, and self-efficacy in their illness management (patient activation) may be better equipped to take a more active

role in initiating SDM. Patient activation is increasingly being recognized as an important set of skills for managing mental health conditions (Chinman et al., 2015; Druss et al., 2010; Green et al., 2010; Salyers, Matthias, Sidenbender, & Green, 2013; Salyers et al., 2009).

SDM is by definition a shared, dyadic process, with consumers and their providers engaged in active, complementary roles (Charles, Gafni, & Whelan, 1997; Hamann & Heres, 2014). However, providers do not always facilitate SDM or encourage consumers to express opinions and otherwise participate in treatment decision making (Fukui et al., 2014; Salyers et al., 2009). In this study we sought to better understand the consumer's role in SDM by examining consumer initiation of the SDM process. Toward this end, we assessed SDM in regularly scheduled medication consultations for consumers with mental illness, with an emphasis on whether the consumer initiated each SDM element, and examined the relationship between consumer initiation of SDM and variables related to consumers' self-management and the consumer-provider relationship. We expected that consumer initiation would be positively associated with better illness self-management and a stronger relationship with one's provider.

Methods

Setting and Participants

This study was conducted in a psychiatric outpatient clinic at a Veterans Affairs medical center. The clinic has 23 providers serving approximately 5,200 veterans with diagnoses including depression, anxiety disorder, and PTSD. Data collection took place from January 2012 to September 2012. One psychiatrist and two nurse practitioners, all female, and all licensed prescribers, were approached for study participation. All three agreed to participate in the study. Consumers were eligible for participation if they were seeing one of the three consenting providers, had an appointment during the study period, and were not experiencing symptom exacerbations that were of concern to the provider.

Procedures

A research assistant (RA) arranged data collection days with each provider, and on these days the RA approached consumers scheduled with the participating providers to explain the study. If interested, the consumer completed an informed consent process with the RA and was given the opportunity to ask questions about study participation. While consumers were told the study was about consumer-provider communication, they were not informed about the interest in shared decision making in an effort not to influence any decision making that would take place in visits. When the consumer entered the exam room with the provider, the RA placed a small digital audio recorder in the room, turned it on, and waited outside during the consumer's appointment. When the visit was over, the RA took the consumer to a private office where questionnaires were administered. Consumers were paid \$10 after the clinic visit recording and \$20 after administration of questionnaires. All research procedures were approved by the local Institutional Review Board and medical center review committee.

Measures

Demographics and Diagnoses—We collected demographic information from consumer self-report; mental health diagnoses were obtained from each consumer's medical record.

Variables Related to Self-Management—Medication adherence was measured with the 10-item Medication Adherence Rating Scale (MARS). The first four items, known as the Morisky Scale (Morisky, Green, & Levine, 1986), measure medication adherence behaviors (e.g., "Do you ever forget to take your medication?"). The last six items measure attitudes and beliefs about medications (e.g., "My thoughts are clearer on medication."). The scale has been shown to have adequate internal consistency, test-retest reliability, and high positive correlations with the Medication Adherence Questionnaire (r = .79) and the Drug Attitude Inventory (r = .82) in a sample of people with schizophrenia or other psychotic illnesses (Thompson, Kulkarni, & Sergejew, 2000). Lower values indicate higher self-reported adherence.

Illness self-management was measured with the Illness Management and Recovery Scale (IMR Scale, Client Version), a 15-item questionnaire rated on a 5-point behaviorally-anchored scale. Questions include items related to progress toward goals, knowledge about mental illness, involvement with significant others, symptom distress and coping, and alcohol and drug use. The scale has been shown to be internally consistent, with good test-retest reliability and convergent validity (Salyers, Godfrey, Mueser, & Labriola, 2007).

The Mental Health Version of the Patient Activation Measure (PAM-MH) was used to assess patient activation, i.e., the knowledge, skills, and confidence to manage illness (Green et al., 2010). The 13-item PAM-MH has been used in several studies of people with mental illness, and shows strong reliability and validity (Druss et al., 2010; Green et al., 2010; Kukla et al., 2013; Salyers et al., 2009). Scores range from 0 to 100, with higher scores indicating greater activation.

Variables Related to the Consumer-Provider Relationship—Length of the consumer-provider relationship was measured through consumer self-report.

Working Alliance was measured with the Working Alliance Inventory (WAI), which measures consumer-provider agreement on treatment goals, collaboration to achieve these goals, and degree of emotional bond (i.e., liking and trust) between consumers and providers (Fuertes et al., 2007). In its original development and validation, the WAI showed high reliability and demonstrated convergent, discriminant, concurrent, and predictive validity (Horvath & Greenberg, 1989). We administered the short form (12 items) of the client version of the WAI and examined total scores as well as scores on three subscales: task, bond, and goals.

Shared Decision Making and Consumer Initiation—The Shared Decision Making (SDM) Scale is adapted from Braddock's Informed Decision-Making Scale (Braddock, Edwards, Hasenberg, Laidley, & Levinson, 1999; Braddock, Fihn, Levinson, Jonsen, & Pearlman, 1997; Braddock et al., 2008), which has demonstrated high reliability in several

studies of decision-making in primary care and surgery (Braddock et al., 1999; Braddock et al., 1997; Braddock et al., 2008; Ling, 2008). The SDM scale has been shown to reliably assess shared decision making in mental health consultations (Salyers et al., 2012). The scale identifies nine elements of shared decision making: 1) discussion of the consumer's role in decision making, 2) discussion of the consumer's goal/context of decision, 3) discussion of the clinical issue or nature of the decision, 4) discussion of alternatives, 5) discussion of pros and cons relevant to the decision, 6) discussion of uncertainties associated with the decision (e.g., likelihood/probability of success), 7) assessment of consumer understanding, 8) assessment of consumer's desire for others' input, and 9) exploration of the consumer's preferences. Each item is scored as absent (0), partial (1), or complete (2), depending on the extent of discussion. Additionally, and of particular interest here, each element is scored for consumer initiation (coded as present or absent).

Each clinic visit recording was professionally transcribed, and four trained coders independently coded transcripts. One of every three transcripts was coded independently by all four coders, who then met to compare coding of each common transcript and arrive at consensus. This ensured that coding was consistent and stable across coders and transcripts over time.

Data Analysis

Frequencies were calculated for discussion (absent, partial, or complete) and initiation (consumer or provider) of each element. Independent sample t-tests were used to determine whether differences in means for each consumer self-management and relationship variable differed when consumer initiation of an SDM element was present (1) versus absent (0). Elements that occurred in <10% of cases (Elements 1 and 8) were excluded.

Because this study was exploratory, we did not adjust for multiple comparisons. Although adjusting the alpha level in multiple comparisons reduces the risk of Type 1 error, this practice simultaneously increases the risk of Type 2 error. This is of particular concern in exploratory contexts, such as the current study, where relationships that are potentially important may be missed (Feise, 2002; MacDonald, 2014; Rothman, 1990). We also report effect sizes, which are not influenced by sample size and provide an indication of the practical significance of findings (Feise, 2002). We discuss any result as statistically significant at p < .05. SAS version 9.3 was used for analyses.

Results

One hundred-two consumers were approached to participate in the study; 23 (22.5%) declined. Most common reasons for declining were that consumers were experiencing anxiety, they did not have time, or lacked interest. Seventy-nine consumers participated in the study. Four were unable to stay after their clinic visit to complete the post-visit interview and questionnaires, and were dropped from subsequent analysis. Results are presented only for the recorded visits that included a treatment decision (i.e., discussion with an explicit course of action, n=63). Treatment decisions included the decision to stop or add a medication, change dosage, add a non-medication alternative (e.g., therapy), and change the timing of a medication. For a more detailed description of types of decisions and discussion

of decision complexity in mental health visits, see Fukui et al. (2014). Consumers ranged in age from 23 to 71 years (M=53±10). Nine (14%) were female; all were veterans. Fortyseven (75%) were White; the remaining 16 (25%) were African American, Hispanic, or self-identified as another race/ethnicity. Primary diagnoses, obtained from medical records, were anxiety disorder (including PTSD, 56%), mood disorder (40%), and schizophrenia spectrum disorder (3%).

Consumer Initiation of SDM Elements

Providers more frequently initiated all SDM elements except Element 2, discussion of the consumer's goal/context of decision. When this element was discussed, consumers initiated the discussion 60% of the time, versus 40% for provider initiation. See Table 1 for frequency of consumer and provider initiation of all elements.

Contrary to expectations, not all associations were significant. Specifically, consumer self-management and relationship variables were significantly associated with three SDM elements (discussion of consumer goals, treatment alternatives, and cons of a decision).

Consumers who initiated a discussion of their goals or the context of the decision (Element 2) were more highly activated (M=66.34±14.97) than those who did not initiate this discussion (M=56.65±16.19) [t(59)=-2.39, p<.05, d=0.6]. Consumers who initiated Element 4, discussion of alternatives, had a significantly shorter relationship with their providers (M=19.57±10.55 months) than those who did not initiate (M=31.15±26.92 months) [t(18.6)=2.15, p<.05, d=0.6]. In addition, consumers who initiated this element had higher scores on the Goals subscale of the WAI (M=23.02±3.89 versus M=26.29±1.50) [t(19.2)= -4.23, p<.001, t=1.0]. Thus, consumers who initiated a discussion of treatment alternatives had known their providers for less time, and were more likely to believe that they shared goals with their providers.

For Element 5, consumer-initiated discussion of pros (benefits of a course of action) was not associated with any variables measured. However, consumers who initiated discussion of cons (negative consequences of a course of action) had lower mean IMR scores (M=3.06±0.61 for consumer initiation, M=3.51±0.56 for no consumer initiation) [t(59)=2.38, p<.05, d=0.8] and higher MARS total scores (M=3.80±2.57 for consumer initiation, M=2.31±1.70 for no consumer initiation) [t(59)=-2.32, t0.7] than consumers who did not initiate this discussion. That is, consumers who indicated less effective illness management and more negative attitudes toward medications were more likely to bring up the negative consequences of a particular treatment alternative.

Discussion

Shared decision making is recognized as central to recovery-oriented, consumer-centered care, yet we know little about consumer involvement in SDM, including the degree to which consumers initiate SDM without prompting or invitation from providers, and what factors are associated with initiation. We found that of the nine elements of SDM measured by the SDM scale, consumers initiated only one element more frequently than providers—the goal or context of the decision. In addition, consumer initiation of three of the nine elements

(goal/context of the decision, alternatives, and negative consequences of an alternative) had significant associations with measured variables. The effect sizes were medium to large. No other relationships were found among the other six elements and variables measured.

Discussion of the goal or context of the decision (i.e., how a proposed treatment might affect one's life) was the element most frequently initiated by consumers (60% of the time, with the next-frequent elements consumer-initiated in 30% of discussions). This finding is not necessarily surprising, given that consumers are more likely to be attuned to the context of their own lives than providers (Drake, Deegan, & Rapp, 2010). In addition, consumers who were more highly activated were those who initiated a discussion of their treatment goals or the context of the decision. It is unclear from our study design whether this is a causal relationship (i.e., being activated facilitated consumer initiation of this discussion), or whether other factors led to initiation of this discussion, which then in turn helped to activate consumers. Prior work has indicated that highly activated consumers with mental illness demonstrated greater acceptance of and control over their illness, both through medication adherence and by finding activities that they believed help with symptom management (Salyers et al., 2013). This sense of control and active self-management may manifest in treatment decisions by consumers driving the discussion of their treatment goals and how a proposed treatment would fit into their recovery goals and lifestyle. This suggests that a consumer's activation might lead to these initiation behaviors, but further research is needed ascertain whether this is a causal relationship.

Consumers who initiated a discussion of treatment alternatives scored higher on the Goals subscale of the WAI. Thus, consumers who believed that their providers understood and shared their treatment goals also initiated a discussion of possible treatment alternatives. Although WAI total was not significantly associated with consumer initiation, it is possible that the goals subscale is particularly relevant to participation in SDM, given the goal-driven nature of sharing decisions about mental health treatment (Braddock et al., 1999; Charles, Gafni, & Whelan, 1999). It is unclear whether having shared goals with providers facilitated consumer initiation of the discussion of treatment alternatives, or whether engaging in such discussions helped to foster a sense of shared goals between consumers and providers, which contributed to consumers and providers having a mutual understanding of treatment goals.

In addition, shorter consumer-provider relationships were related to consumer initiation of alternatives. This finding may appear counterintuitive, given that development of a partnership between consumers and providers is considered important to accomplish SDM (Charles, Gafni, et al., 1999; Charles, Whelan, & Gafni, 1999), and, at least theoretically, longer relationships should lead to more robust partnerships. However, it may be that consumer-provider dyads with a longer relationship are more likely to have discussed alternatives over time, eliminating the potential need for these discussions to be revisited (at least in the particular visit we recorded). Another possible explanation is that newer consumers were experiencing more acute mental health symptoms, which may have prompted them either to resume care after a break or to seek care from a new provider. In this case, symptom exacerbations might have prompted consumers to seek treatment alternatives. However, we did not have symptom or distress measures to directly test these possibilities, nor are we able to conclude from our data that shorter relationships actually led

to consumer initiation of alternatives. Other factors that we did not measure might explain this finding.

Consumer initiation of the negative consequences (cons) of a proposed treatment was related to poorer medication attitudes and adherence (measured by the MARS total) and less effective illness management. That consumers with poor adherence and negative attitudes toward medications were more likely to bring up the negative consequences of a course of an action is not surprising since poorer attitudes and adherence could elicit a focus on negative treatment consequences. It is also possible that consumers with lower adherence and more negative attitudes have had more negative experiences in the past, either with the medications themselves, or with providers who may be perceived by consumers as failing to present the pros and cons of medication alternatives in a balanced manner. Alternatively, the act of bringing up and discussing the negative consequences of a treatment could have an impact on a consumer's subsequent attitudes and adherence about the medication in question. By focusing on the negative aspects of a treatment, consumers may be predisposing themselves to have a negative experience with a given treatment.

Similarly, less effective illness management was associated with initiation of a discussion of treatment cons. If consumers do not believe they are managing their illness effectively, they might be more likely to focus on negative consequences of a treatment. *Although we are unable to draw conclusions about the direction of these associations from our data*, less effective illness management might foster skepticism in the effectiveness of a particular treatment—especially if a consumer has not experienced positive results with treatments. Alternatively, it is possible that experiencing negative consequences from a treatment, including lack of effectiveness, could lead a consumer to believe that they are doing a poor job of managing their illness. In cases like this, it is especially important for the provider to work collaboratively with the consumer to present all possible treatment options, including non-medication alternatives, to help facilitate more effective illness management for the consumer.

Although shared decision making has been studied in a variety of contexts, it has frequently been conceptualized as a construct that is present or absent to varying degrees, rather than examined on a more fine-grained level, i.e., by looking at specific behaviors or elements that comprise SDM, who initiates these behaviors, and what factors are associated with the initiation of SDM. This is particularly important to understand with respect to consumer initiation, since providers may not always invite consumers to participate in treatment decisions (Hamann et al., 2006; Hamann et al., 2009). In addition, all elements of SDM are not necessarily "equal," nor might they have an equal chance of occurring. Some elements might be easier to discuss or initiate than others, especially for consumers who are more activated, are better self-managers, or have a stronger sense of shared goals with their providers. A more fine-grained examination of SDM is essential not only to better understand the individual behaviors that comprise SDM, but to help inform more targeted SDM interventions that can focus on particular elements or behaviors that do not frequently occur.

A deeper understanding of consumer self-management and consumer-provider relationship factors can help to create tailored, potentially more effective SDM interventions based on these factors. For example, Hamann and Heres call for interventions that help to foster a "participatory atmosphere" to encourage consumers to engage in SDM (Hamann & Heres, 2014). They offer suggestions such as social skills training, health literacy education, and use of motivational strategies with consumers. Similarly, in The Right Question Project, Alegria and colleagues successfully taught mental health consumers communication skills to increase their involvement in decision making, including helping them to formulate questions to increase their knowledge about their illness and treatment options, and to consider their role in the decision-making process and reasons supporting potential decisions (Alegria et al., 2008). Attaining a better understanding of consumer self-management and consumer-provider relationship factors could help to customize interventional approaches such as these to more effectively reach a greater number of consumers, with the ultimate goal of increasing consumer participation in treatment decisions. For example, an intervention might be more effective if it were aimed at increasing working alliance (particularly with respect to shared goals), in addition to teaching SDM behaviors.

In addition to interventions targeted at consumers, providers could also benefit from focused training in SDM. This is particularly important given research indicating that mental health providers generally support the practice of SDM (Hamann et al., 2009; Seale et al., 2006), yet frequently fail to facilitate SDM in clinical encounters (de las Cuevas et al., 2013; Goss et al., 2008; Salyers et al., 2012). Increasing providers' skills in engaging in and facilitating SDM is critical to create an atmosphere of collaboration, equipoise, and ultimately, effective illness management.

This study has some limitations. Because of the exploratory nature of the study, we had only three providers, all female, and did not examine provider factors, such as provider type, years of experience, and provider attitudes. We should also note that some SDM elements occurred too infrequently (regardless of which party initiated) to allow any conclusions to be drawn. Elements 1 (discussion of the consumer's role in decision making) and 8 (assessment of consumer's desire for input from others) occurred in less than 10% of cases and thus were excluded from analyses. Because this study was exploratory and had a limited sample size, we did not control for confounding factors beyond binary relationships. Further, the small sample size might have led to some of the null findings due to insufficient power. It is also important to note that, although we uncovered interesting and potentially useful associations between consumer and relationship characteristics and consumer initiation of SDM elements, our study design did not allow us to make causal inferences about these relationships; future research is needed to better understand potential causality. In addition, this study was cross-sectional; thus we only examined one visit per consumer in the context of long-term, ongoing illness management. It is likely that we missed many aspects of SDM that were discussed in visits prior or subsequent to the observed visit. This limitation illustrates the need for longitudinal work in SDM involving ongoing conditions, such as mental health care. Further, consumer initiation of SDM elements does not provide a complete picture of consumer involvement. For example, a provider may simply bring up an SDM element before the consumer has a chance to mention it, or, once the provider initiates an element, the consumer may respond enthusiastically to the invitation to participate and

contribute readily to the discussion. However, in cases where consumers do not have providers who initiate and encourage SDM, consumer initiation is critical. We should also note that the measure of medication attitudes and adherence employed, the MARS, has been validated in severe mental illness, but not with consumers with diagnoses such as anxiety, PTSD, and depression, which comprised the majority of our study sample. Finally, this study took place at a single VA medical center with mostly male consumers. There might be variations among different mental health clinic sites, as well as differences between veterans and non-veterans, which we were not able to examine in this study.

Little is known about what factors are associated with consumer involvement in and initiation of SDM. This lack of knowledge is a notable gap given the ethical obligation to involve consumers in decisions about their mental health care (Drake & Deegan, 2009); the recognition that consumer involvement in their mental health treatment is an integral part of person-centered, recovery-oriented care (Drake et al., 2010); and the evidence suggesting that the occurrence of SDM is still generally low (Hamann et al., 2009; Salyers et al., 2012). Recent work has demonstrated that higher levels of SDM are associated with greater decision complexity and greater consumer activity in the visit, and that consumer-provider agreement on a course of action is related to exploration of consumer preferences in the visit (Fukui et al., 2014). This study extends that work by examining in finer detail the particular behaviors that comprise SDM in an effort to better understand what factors related to self-management and the consumer-provider relationship are associated with consumer initiation of SDM.

This study helps to advance our limited understanding of consumer involvement in SDM by examining consumer initiation of SDM. Future research should seek to replicate and extend findings from this exploratory study and seek to understand whether the associations in this study are related causally. Understanding the presence and direction of any causal relationships will help to facilitate the designing and testing of tailored interventions to help consumers become more involved in decisions about their mental health treatment.

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References

- Adams JR, Drake RE, Wolford GL. Shared decision-making preferences of people with severe mental illness. Psychiatric Services. 2007; 58(9):1219–1221. [PubMed: 17766569]
- Alegria M, Carson N, Flores M, Xinliang L, Shi P, Lessios AS, Polo A, Allen M, Fierro M, Interian A, Jimenez A, La Roche M, Lee C, Lewis-Fernandez R, Livas-Stein G, Safar L, Shuman C, Storey J, Shrout PE. Activation, self-management, engagement, and retention in behavioral health care: a randomized clinical trial of the DECIDE intervention. JAMA Psychiatry. 2014; 71(5):557–565. DOI: 10.1001/jamapsychiatry.2013.4519 [PubMed: 24647680]
- Alegria M, Polo A, Gao S, Santana L, Rothstein D, Jimenez A, Lyons M, Mendieta F, Oddo V, Normand SL. Evaluation of a patient activation and empowerment intervention in mental health care. Medical Care. 2008; 46(3):247–256. [PubMed: 18388839]

Beisecker AE, Beisecker TD. Patient information-seeking behaviors when communicating with doctors. Medical Care. 1990; 28(1):19–28. [PubMed: 2296214]

- Braddock CH, Edwards KA, Hasenberg NM, Laidley TL, Levinson W. Informed decision making in outpatient practice: time to get back to basics. JAMA. 1999; 282(24):2313–2320. [PubMed: 10612318]
- Braddock CH, Fihn SD, Levinson W, Jonsen AR, Pearlman RA. How doctors and patients discuss routine clinical decisions: informed decision making in the outpatient setting. Journal of General Internal Medicine. 1997; 12:339–345. [PubMed: 9192250]
- Braddock CH, Hudak PL, Feldman JJ, Bereknyei S, Frankel RM, Levinson W. "Surgery is certainly one good option": quality and time-efficiency of informed decision-making in surgery. The Journal of Bone and Joint Surgery. 2008; 90:1830–1838. [PubMed: 18762641]
- Charles C, Gafni A, Whelan T. Shared decision-making in the medical encounter: What does it mean? (or it takes at least two to tango). Social Science & Medicine. 1997; 44(5):681–692. DOI: 10.1016/S0277-9536(96)00221-3 [PubMed: 9032835]
- Charles C, Gafni A, Whelan T. Decision-making in the physician-patient encounter: revisiting the shared treatment decision-making model. Social Science & Medicine. 1999; 49(5):651–661. DOI: 10.1016/S0277-9536(99)00145-8 [PubMed: 10452420]
- Charles C, Whelan T, Gafni A. What do we mean by partnership in making decisions about treatment? BMJ. 1999; 319(7212):780–782. [PubMed: 10488014]
- Chinman M, Oberman RS, Hanusa BH, Cohen AN, Salyers MP, Twamley EW, Young AS. A cluster randomized trial of adding peer specialists to intensive case management teams in the Veterans Health Administration. Journal of Behavioral Health Services and Research. 2015; 42(1):109–121. DOI: 10.1007/s11414-013-9343-1 [PubMed: 23657754]
- de las Cuevas C, Rivero-Santana A, Perestelo-Perez L, Serrano-Aguilar P. Shared decision making in psychiatric practice and the primary care setting is unique, as measured using a 9-item Shared Decision Making Questionnaire (SDM-Q-9). Neuropsychiatric Disease Treatment. 2013; 9:1045–1052. [PubMed: 23950646]
- Drake RE, Deegan PE, Rapp C. The promise of shared decision making in mental health. Psychiatric Rehabilitation Journal. 2010; 34(1):7–13. [PubMed: 20615839]
- Drake RE, Deegan PE. Shared decision making is an ethical imperative. Psychiatric Services. 2009; 60(8):1007. [PubMed: 19648184]
- Druss BG, Zhao L, von Esenwein SA, Bona JR, Fricks L, Jenkins-Tucker S, Sterling E, Diclemente R, Lorig K. The Health and Recovery Peer (HARP) Program: a peer-led intervention to improve medical self-management for persons with serious mental illness. Schizophrenia Research. 2010; 118(1–3):264–270. [PubMed: 20185272]
- Feise RJ. Do multiple outcome measures require p-value adjustment? BMC Medical Research Methodology. 2002; 2(8)doi: 10.1186/1471-2288-2-8
- Frosch DL, May SG, Rendle KAS, Tietbohl C, Elwyn G. Authoritarian physicians and patients' fear of being labeled "difficult" among key obstacles to shared decision making. Health Affairs. 2012; 31(5):1030–1038. [PubMed: 22566443]
- Fuertes JN, Mislowack A, Bennett J, Paul L, Gilbert TC, Fontan G, Boylan LS. The physician-patient working alliance. Patient Education & Counseling. 2007; 66(1):29–36. [PubMed: 17188453]
- Fukui S, Salyers MP, Matthias MS, Holter MC, Collins L, Rose N, Thompson J, Coffman M, Torrey WC. Predictors of shared decision making and level of agreement between consumers and providers in psychiatric care. Community Mental Health Journal. 2014; 50(4):375–382. DOI: 10.1007/s10597-012-9584-0 [PubMed: 23299226]
- Goss C, Moretti F, Mazzi MA, Del Piccolo L, Rimondini M, Zimmermann C. Involving patients in decisions during psychiatric consultations. The British Journal of Psychiatry. 2008; 193(5):416– 421. [PubMed: 18978325]
- Green C, Perrin N, Polen M, Leo M, Hibbard J, Tusler M. Development of the patient activation measure for mental health. Administration and Policy in Mental Health and Mental Health Services Research. 2010; 37(4):327–333. DOI: 10.1007/s10488-009-0239-6 [PubMed: 19728074]

Hamann J, Cohen R, Leucht S, Busch R, Kissling W. Do patients With schizophrenia wish to be Involved in decisions about their medical treatment? American Journal of Psychiatry. 2005; 162(12):2382–2384. [PubMed: 16330606]

- Hamann J, Heres S. Adapting shared decision making for individuals with severe mental illness. Psychiatric Services. 2014; 65:1483–1486. DOI: 10.1176/appi.ps.201400307 [PubMed: 25756970]
- Hamann J, Langer B, Winkler V, Busch R, Cohen R, Leucht S, Kissling W. Shared decision making for in-patients with schizophrenia. Acta Psychiatra Scandinavica. 2006; 114:265–273.
- Hamann J, Mendel R, Buhner M, Kissling W, Cohen R, Knipfer E, Eckstein HH. How should patients behave to facilitate shared decision making: the doctors' view. Health Expectations. 2012; 15:360–366. [PubMed: 21624024]
- Hamann J, Mendel R, Cohen R, Heres S, Ziegler M, Buhner M, Kissling W. Psychiatrists' use of shared decision making in the treatment of schizophrenia: patient characteristics and decision topics. Psychiatric Services. 2009; 60(8):1107–1112. [PubMed: 19648199]
- Horvath AO, Greenberg LS. Development and validation of the Working Alliance Inventory. Journal of Counseling Psychology. 1989; 36(2):223–233.
- IOM. Crossing the quality chasm: a new health system for the twenty-first century. Washington, D.C: 2001
- Karnieli-Miller, O.; Salyers, MP. Serious Mental Illnesses (SMI): Person-centered Approaches. Abingdon, U.K: Radcliffe Publishing; 2010. Clinical communications with persons who have severe mental illnesses.
- Klingaman EA, Medoff DR, Park SG, Brown CH, Fang L, Dixon LB, Hack SM, Tapscott SL, Walsh MB, Kreyenbuhl JA. Consumer satisfaction with psychiatric services: the role of shared decision making and the therapeutic relationship. Psychiatric Rehabilitation Journal. 2015 E-pub ahead of print.
- Korsch BM, Gozzi EK, Francis V. Gaps in doctor-patient communication. 1. Doctor-patient interaction and patient satisfaction. Pediatrics. 1968; 42(5):855–871. [PubMed: 5685370]
- Kukla M, Salyers MP, Lysaker PH. Levels of patient activation among adults with schizophrenia: associations with hope, symptoms, medication adherence, and recovery attitudes. The Journal of Nervous and Mental Disease. 2013; 201(4):339–344. [PubMed: 23538980]
- Ling BS, Trauth JM, Fine MJ, Mor MK, Renick A, Braddock CH, Bereknyei S, Weissfeld JL, Schoen RE, Ricci EM, Whittle J. Informed decision-making and colorectal cancer screening. Is it occurring in primary care? Medical Care. 2008; 46:23–29.
- MacDonald, JH. Handbook of biological statistics. 3. Baltimore, MD: Sparky House Publishing; 2014.
- Matthias MS, Salyers MP, Frankel RM. Re-thinking shared decision-making: context matters. Patient Education and Counseling. 2013; 91:176–179. http://dx.doi.org/10.1016/j.pec.2013.01.006. [PubMed: 23410979]
- Montori VM, Gafni A, Charles C. A shared treatment decision-making approach between patients with chronic conditions and their clinicians: the case of diabetes. Health Expectations. 2006; 9(1):25–36. [PubMed: 16436159]
- Morisky DE, Green LW, Levine DM. Concurrent and predictive validity of a self-reported measure of medication adherence. Medical Care. 1986; 24:67–74. [PubMed: 3945130]
- Park SG, Derman M, Dixon LB, Brown CH, Klingaman EA, Fang LJ, Medoff DR, Kreyenbuhl J. Factors associated with shared decision-making preferences among veterans with serious mental illness. Psychiatric Services. 2014; 65(12):1409–1413. [PubMed: 25178383]
- Roter DL, Stewart M, Putnam SM, Lipkin M Jr, Stiles W, Inui TS. Communication patterns of primary care physicians. JAMA: The Journal of the American Medical Association. 1997; 277(4):350–356. [PubMed: 9002500]
- Rothman KJ. No adjustments are needed for multiple comparisons. Epidemiology. 1990; 1(1):43–46. [PubMed: 2081237]
- Salyers MP, Godfrey JL, Mueser KT, Labriola S. Measuring illness management outcomes: a psychometric study of clinician and consumer rating scales for illness self management and recovery. Community Mental Health Journal. 2007; 43:459–480. [PubMed: 17514504]

Salyers MP, Matthias MS, Fukui S, Holter MC, Collins L, Rose N, Thompson J, Coffman M, Torrey WC. Measuring shared decision making in psychiatric care. Psychiatric Services. 2012; 63:779–784. [PubMed: 22854725]

- Salyers MP, Matthias MS, Sidenbender S, Green A. Patient activation in schizophrenia: insights from stories of illness and recovery. Administration and Policy in Mental Health and Mental Health Services Research. 2013; 40(5):419–427. DOI: 10.1007/s10488-012-0435-7 [PubMed: 22936284]
- Salyers MP, Matthias MS, Spann CL, Lydick JM, Rollins AL, Frankel RM. The role of patient activation in psychiatric visits. Psychiatric Services. 2009; 60(11):1535–1539. [PubMed: 19880475]
- Seale C, Chaplin R, Lelliott P, Quirk A. Sharing decisions in consultations involving anti-psychotic medication: A qualitative study of psychiatrists' experiences. Social Science & Medicine. 2006; 62(11):2861–2873. DOI: 10.1016/j.socscimed.2005.11.002 [PubMed: 16343722]
- Thompson K, Kulkarni J, Sergejew AA. Reliability and validity of a new Medication Adherence Rating Scale (MARS) for the psychoses. Schizophrenia Research. 2000; 42(3):241–247. DOI: 10.1016/S0920-9964(99)00130-9 [PubMed: 10785582]
- Young HN, Bell RA, Epstein RM, Feldman MD, Kravitz RL. Physicians' Shared Decision-Making Behaviors in Depression Care. Archives of Internal Medicine. 2008; 168(13):1404–1408. [PubMed: 18625920]

Table 1

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Frequency of Consumer Initiation of SDM Elements

		Element		Consumer	Consumer Initiated
Element	Absent	Partial	Complete	səX	oN
E1: Discussion of consumer's role in decision making	57 (90.5%)	6 (9.5%)	0 (0%)	3 (4.8%)	(92.2%)
E2: Discussion of consumer's goal/context of decision	1 (1.6%)	1 (1.6%)	61 (96.8%)	38 (60.3%)	25 (39.7%)
E3: Discussion of clinical issue or nature of decision	3 (4.8%)	8 (12.7%)	52 (82.5%)	11 (17.5%)	52 (82.5%)
E4: Discussion of alternatives	18 (28.6%)	19 (30.2%)	26 (41.3%)	7 (11.1%)	26 (88.9%)
E5: Discussion of pros and cons relevant to decision	8 (12.7%)	19 (30.2%)	36 (57.1%)	10 (15.9%)	53 (84.1%)
E6: Discussion of uncertainties associated with decision	15 (23.8%)	15 (23.8%) 25 (39.7%)	23 (36.5%)	3 (4.8%)	60 (95.2%)
E7: Assessment of consumer's understanding	38 (60.3%)	38 (60.3%) 19 (30.2%)	6 (9.5%)	19 (30.2%)	44 (69.8%)
E8 Assessment of consumer's desire for others' input	59 (93.7%)	1 (1.6%)	3 (4.8%)	1 (1.6%)	62 (98.4%)
E9: Exploration of consumer preference	10 (15.9%)	23 (36.5%)	10 (15.9%) 23 (36.5%) 30 (47.6%) 19 (30.2%)	19 (30.2%)	44 (69.8%)