Résumé

L'environnement psychosocial au travail et l'utilisation de données probantes par les professionnels de la santé

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Cette étude a pour but d'étudier les liens entre divers aspects de l'environnement psychosocial au travail et l'utilisation de données probantes par les professionnels de la santé dans le cadre de leur pratique. Une descriptive corrélationnelle a été élaborée et les professionnels de la santé œuvrant dans les unités de santé mentale de deux hôpitaux ont été invités à remplir un questionnaire sur leurs perceptions de leur environnement psychosocial au travail et sur leur utilisation de données probantes. Des corrélations et des analyses de régression ont été réalisées et les résultats indiquent qu'il existe une corrélation entre l'utilisation de données probantes et le soutien social, ainsi que le pouvoir décisionnel. Selon les résultats des multiples analyses de régression, le soutien social perçu (β = 0,27, p < 0,01) et le pouvoir décisionnel perçu (β = 0,25, p < 0,01) constituent d'importantes variables explicatives quant à l'utilisation de données probantes. Les auteurs de l'étude ont conclu que la présence d'un solide soutien social et d'un pouvoir décisionnel certain au sein des groupes interprofessionnels incite les professionnels de la santé à utiliser des données probantes dans le cadre de leur pratique.

Mots clés : environnement psychosocial au travail, interprofessionnel, utilisation de données probantes

The Psychosocial Work Environment and Evidence Utilization by Health Professionals

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The purpose of this study was to investigate the relationships between dimensions of the psychosocial work environment and health professionals' use of evidence in their practice. A correlational descriptive design was developed. Health professionals working in mental health units at 2 hospitals were asked to complete a questionnaire about their perceptions of the psychosocial work environment and their use of evidence. Correlations and regression analyses were performed. Use of evidence was found to be correlated with social support and decision latitude. Results of multiple regression analyses found perceived social support ($\beta = .27$, $p < .01$) and perceived decision latitude ($\beta = .25$, $p < .01$) to be significant predictors of the use of evidence. The authors conclude that good social support and decision latitude among interprofessional groups may promote use of evidence by health professions in their practice.

Keywords: psychosocial work environment, interprofessional, use of evidence

Health-care workers are being encouraged to make ever greater use of not only their own knowledge but also the knowledge that is generated by scientific research (Dickinson, 2004). As a result of this trend, evidence-based practice has become a tool for justifying certain activities or for demonstrating the inefficacy of practices that have proven to be unfounded or very costly (Beaulieu, Battista, & Blais, 2001). In a synthesis of literature on research utilization, three general areas of research activity were identified: descriptions of research utilization models, studies examining individual determinants of research use, and studies examining the influence of organizational characteristics on research use (Cummings, Estabrooks, Midodzi, Wallin, & Hayduk, 2007; Estabrooks, Scott-Findlay, & Winther, 2004). There is increased awareness that organizational influences are important to the use of research in nursing (Cummings et al., 2007). Despite the increase in the number of empirical investigations of research utilization, few investigators have examined research utilization in an interprofessional context. Most of the research has focused on the practices of individual practitioners or clusters of practitioners in a single

profession (Zwarenstein & Reeves, 2006). The research reported here was carried out with health professionals working in an interprofessional context and was based on a framework that would allow for examination of organizational factors linked to workload, autonomy, support, and reward (Karasek & Theorell, 1990; Kristensen, 1999; Siegrist, 1996).

Literature Review

For the purposes of this study, evidence-based practice is the integration of individual clinical expertise with the best available external clinical evidence from systematic research. Evidence-based practice is informed by data from randomized clinical trials as well as systematic reviews, meta-analyses, and the consensus of experts. It includes the dissemination and use of information so that the evidence reaches clinical practice (Sackett, Rosenberg, Muir Gray, Haynes, & Richardson, 1996; Sigma Theta Tau International, 2006). In order to describe the use of evidence by health professionals in their practice, the research team adopted the utilization stages described by Knott and Wildavsky (1980). According to these authors, the effectiveness of the knowledge utilization process rests on user performance in a series of interdependent activities or stages: (1) *reception* – having access to knowledge through documents or consultants/experts, (2) *cognition* – reading and understanding studies and reports, (3) *reference* – using and drawing inspiration from one's knowledge, (4) *effort* – making an effort to disseminate and foster the use of knowledge, (5) *adoption* – adopting knowledge in one's decision-making process, (6) *implementation* – using knowledge in projects and actions, and (7) *impact* – measuring the results of applying knowledge. In practice, health professionals do not employ a linear model or work through the stages one by one in their utilization of evidence. According to Gabbay and May (2004), the evidence utilization process is much more dynamic and iterative. In this study, "knowledge" refers to evidence and "evidence utilization" refers to all of Knott and Wildavsky's (1980) stages combined (see Appendix 1).

Fostering the use of evidence in health-care practices represents a significant challenge and calls for a variety of strategies and interventions. Several investigators have suggested that the field should not be restricted to individual characteristics and that a large number of factors related to research utilization be examined (Lomas, 1993; Nilson Kajermo, Nordstrom, Krusebrant, & Bjorwell, 1998). Royle et al. (1998) identify organizational barriers to research utilization such as time constraints, limited access to the literature, lack of training in information-seeking and critical appraisal skills, and a work environment that is not conducive to information-seeking. In their study, Cummings et al. (2007) found

hospital characteristics that positively influenced research utilization by nurses, such as staff development, opportunities for nurse-to-nurse collaboration, and staffing and support services. In addition, the Promoting Action on Research Implementation in Health Services (PARIHS) framework, developed by a group of researchers, has identified three major influences on research implementation: the nature of the evidence used, the ability of the context to cope with change, and the type of facilitation needed to ensure successful change (Kitson, Harvey, & McCormack, 1998; Rycroft-Malone, 2004). Based on the PARIHS framework, Estabrooks, Midodzi, Cummings, and Wallin (2007) identify factors that predict more research utilization among nurses at the individual level (time spent on the Internet and lower levels of emotional exhaustion), at the specialty level (facilitation, nurse-to-nurse collaboration, conducive context, and perceived ability to control policy), and at the hospital level (hospital size). In their systematic review, Zwarenstein and Reeves (2006) suggest that interprofessional education and collaboration interventions might affect knowledge translation and evidence-based practice. According to these authors, there is little information on mechanisms for improving interprofessional collaboration and facilitating evidence-based care. Several authors cite the importance of context in evidence-based practice (Aiken, Sloane, & Sochalski, 1998; Dunning, Abi-Aad, Gilbert, Hutton, & Brown, 1999). McCormack et al. (2002) define context as "the setting in which practice takes place." According to Nonaka and Takeuchi (1995), the organizational knowledge-creation process takes place mainly at the group level but the organization provides the enabling conditions; the organization provides organizational contexts or mechanisms to facilitate group activity, as well as the creation and accumulation of knowledge at the individual level. In the present study, the organizational context is defined by the psychosocial work environment (Karasek & Theorell, 1990; Kristensen, 1999; Siegrist, 1996). This framework allows for an examination of organizational factors linked to workload, autonomy, social support, and reward as dimensions of the work environment that influence use of evidence among health professionals from interprofessional groups.

Theoretical Framework

Psychosocial Work Environment

This framework, as defined by Kristensen (1999), is primarily based on Karasek's Job Strain Model (Karasek & Theorell, 1990) and Siegrist's (1996) Effort-Reward Imbalance Model. The dimensions of the Job Strain Model are psychological demands (amount of work, complexity of work, and time constraints) and decision latitude (the ability to use

one's qualifications and develop new job skills and the opportunity to choose how to do one's work and to influence related decisions). Social support has been included in the model to take into account the support of superiors and colleagues (Johnson & Hall, 1988). The principal hypothesis of this model is that job strain results from the combined effects of increased psychological demands and low decision latitude in the workplace, and that this increases health risks among health professionals. Social support from both colleagues and superiors is expected to moderate the effect of job strain.

The Effort–Reward Imbalance Model is based on the hypothesis that a work situation characterized by a combination of a high degree of effort expended and little reward received (money, esteem, and career opportunities) can have pathological effects on health (Siegrist, 1996). Under this theoretical framework, an optimal psychosocial work environment is characterized by demands that are adapted to a worker's abilities (psychological demands), a satisfactory level of influence (decision latitude), adequate social support from superiors and colleagues, and a balance between effort expended and rewards received (Karasek & Theorell, 1990; Siegrist, 1996). The independent variables are psychological demands, decision latitude, social support, and the effort/reward ratio, and the dependent variable is use of evidence.

Purpose

The purpose of the study was to investigate, in an interprofessional context, the relationships between four dimensions of the psychosocial work environment (psychological demands, decision latitude, social support, and effort/reward) and health professionals' use of evidence in their practice. Three questions were addressed: *To what degree are health professionals exposed to a high-risk psychosocial work environment? What correlations can be found between variables of the psychosocial environment and the use of evidence by health professionals? Which of these variables can predict use of evidence?*

Methods

Design and Sample

We developed a correlational descriptive design for this quantitative study. In this case, and in exploratory studies in general, a correlational design is more appropriate (Aronson, Ellsworth, Carlsmith, & Gonzales, 1990). The participants were health professionals working in the mental health field at two Canadian institutions that were in the process of reorganizing work. Institution A was a French-speaking hospital and insti-

tution B was an English-speaking university hospital. The participants were surveyed before the changes began. This convenience sample comprised 365 English-speaking and French-speaking professionals within different health-care disciplines (nurses, psychiatrists, physicians, psychologists, specialized educators, social workers, and occupational therapists). The study was approved by the ethics committees of both hospitals. In 2006 the participants received, through the hospital's internal mail, a letter describing the study and inviting their participation, along with a self-administered questionnaire, a consent form, and a self-addressed envelope. They were instructed to complete the questionnaire, which would take approximately 20 minutes, and return it to the primary researcher, together with the consent form, in the envelope provided. Confidentiality was maintained by using numbers to identify participants.

Measures

Sociodemographic variables. Sociodemographic data were collected from all participants. Participants were asked to report their age, gender, and academic background. They also indicated the type of institution where they worked and their job title, department, and employment status. Participants from the two institutions did not differ on any sociodemographic variable except gender: 80.2% of the female participants were from institution A, while the distribution of male participants was relatively equal.

Psychosocial work environment. The validity of the original English version of the scales for psychological demands and decision latitude, from the Job Content Questionnaire (JCQ), has been well documented (Karasek, 1985; Karasek & Theorell, 1990). The psychometric qualities of the French version were evaluated using a representative sample of workers in the province of Quebec ($n = 1,100$). The instrument's internal consistency was supported by Cronbach alpha coefficients ranging from 0.68 to 0.85. Factor analysis was also used to support the bi-dimensional structure postulated by the theory (Brisson et al., 1998; Larocque, Brisson, & Blanchette, 1999).

Decision latitude. Decision latitude was measured using nine questions from the JCQ (Karasek, 1985). This variable was composed of two subscales: use of qualifications and control over task. The range of potential scores for the decision latitude variable was 24 to 96. The scale's internal consistency is $\alpha = .73$ (English-speaking) and $\alpha = .77$ (French-speaking). Respondents with a score less than or equal to 72 (the median score observed among a reference group of workers from the Quebec population) were considered the exposed group, with low decision latitude (Institut de la statistique du Québec, 2000).

Psychological demands. Psychological demands were also measured using nine questions from the JCQ (Karasek, 1985). Potential scores for the psychological demands variable ranged from 4 to 36. The scale's internal consistencies were α = .68 (English-speaking) and α = .70 (French-speaking). Respondents with a score greater than or equal to 24 (the median score observed among workers in Quebec) formed the group with a high level of psychological demands in the workplace (Institut de la statistique du Québec, 2000).

Social support. Social support at work includes support from both colleagues and superiors and has three components: socio-emotional support or esteem, instrumental support, and hostility or conflict (Karasek, 1985). A four-point scale was used to measure social support. *Social support from colleagues* was measured using five items and *social support from superiors* using six items from the JCQ (Karasek, 1985). These scales have been used in several studies with nurses (Bourbonnais, Comeau, & Vézina, 1999; Bourbonnais & Mondor, 2001) and present good psychometric qualities. Potential scores for the social support variable ranged from 11 to 44, and the median score for the present study was 35. The scale's internal consistencies were α = .81 (English-speaking) and α = .81 (French-speaking). The groups with low social support at work consisted of those with a score of less than 35 for social support from colleagues and those with a score of less than 35 for social support from superiors.

Effort/reward imbalance. Reward has three dimensions — money, esteem, and career opportunities — and was measured using 11 questions from Niedhammer and Siegrist's (1998) instrument. Potential scores for the reward variable ranged from 11 to 44. The scale's internal consistencies were α = .81 (English-speaking) and α = .70 (French-speaking). Effort was measured using six items that referred to demanding aspects of the work environment (three items measuring quantitative load, one measuring qualitative load, one measuring increase in total load over time, and one measuring physical load) (Siegrist et al., 2004). The potential range of the effort variable was 6 to 24. The scale's internal consistencies were α = .82 (English-speaking) and α = .70 (French-speaking). In this study, *imbalance between effort and rewards* was measured by a ratio computed for every participant according to the formula $e/(r \times c)$, where *e* is the total score on the effort scale, *r* is the total score on the reward scale, and *c* represents a correction factor for different numbers of items in the nominator and denominator. A correction factor of 6/11 was used. As a result, a value close to 0 indicates a favourable condition (relatively low effort, relatively high reward), whereas values above 1.0 indicate that a high degree of effort was expended without receiving or expecting commensurate rewards (Siegrist et al., 2004).

   Use of evidence in a health professional's practice. In order to describe
and measure the use of evidence by health professionals, the research
team adopted the utilization stages proposed by Knott and Wildavsky
(1980) and Landry, Amara, and Lamari (2001). Based on the work of
these authors, a seven-item evidence utilization scale was developed and
validated in English and French simultaneously, by investigators repre-
senting different disciplines and different English-speaking and French-
speaking cultures. Each item conveyed a degree of utilization based on a
five-point Likert scale (1 = poor; 5 = excellent) (see Appendix 1).
Potential scores for use of evidence ranged from 7 to 35. Although Knott
and Wildavsky (1980) present these stages as a set of interdependent
activities, empirical research has shown that, in practice, health profession-
als do not employ a linear model or work through the stages one by one
in their use of evidence. According to Gabbay and May (2004), the evi-
dence utilization process is much more dynamic and iterative. In addi-
tion, in the present study this scale was cumulative, and the global score
provides information on the health professional's attitude with respect to
global use of evidence. In order to facilitate a common understanding of
evidence among participants, a definition was provided alongside the
instructions for using the scale (see Appendix 1). To verify the scale's
structure, in the present study an exploratory factorial analysis was con-
ducted with the sample (a principal components analysis with direct
oblimin rotation). The findings indicate the emergence of a single factor
(eigenvalue = 4.97, 71% of the variance explained). The scale's internal
consistencies were α = .83 (English-speaking) and α = .94 (French-
speaking). Inter-correlation between the seven items in the scale ranged
from .46 to .80 (mean inter-correlation of .66) and the means of indi-
vidual items ranged from 2.77 to 3.46. The validity of the scale's factorial
structure and the homogeneity of items were supported, which made it
possible to calculate a global score (i.e., a continuous variable computed
by summing the scale's various items). A continuous variable, as com-
puted in the present study, makes it possible to explore this dependent
variable in a way that would not be possible with single items (e.g., cor-
relations, analyses of variance, and regression analyses; Tabachnick &
Fidell, 2001).

Data Analysis

The data were analyzed using SPSS 14.0. Descriptive statistics were cal-
culated for all variables. Pearson correlations were performed, and the
chi-square tests were cross-tabulated in order to describe the association
between variables in the psychosocial work environment and the use of
evidence. Analyses of variance were performed to explore differences
between participants associated with institutions A and B as well as

between nurses and other health professionals. Finally, regression analyses were performed on the data to identify the psychosocial predictors of use of evidence. The level of statistical significance was set at 5% for all the analyses.

Results

Of the 365 health professionals, 149 completed the questionnaire, for a response rate of 40.8%. The final sample therefore consisted of 149 individuals who were 47.3 years of age, on average (*SD* = 11.00; range = 22–77 years). It comprised 86 women (57.7%), 62 men (41.6%), and 1 unreported participant. As for the professions represented, the sample consisted of 30 nurses (20.1%), 35 psychiatrists (23.5%), 4 physicians (2.7%), 23 psychologists (15.4%), 6 specialized educators (4.0%), 17 social workers (11.4%), 17 occupational therapists (11.4%), and 17 others (11.4%). The participants had 17.9 years of service, on average (*SD* = 10.15; range = 1–40 years), and 80.5% were working full time. Finally, the English questionnaire was completed by 36 participants (24.2%) and the French questionnaire by 113 participants (75.8%) (see Table 1).

Table 2 presents the numbers of participants exposed to the psychosocial work environment dimensions. The results reveal that 50.3% of participants reported high psychological demands and 52.7% low social support. Almost half reported low decision latitude (47.7%) and a third noted an imbalance between effort expended and rewards obtained (35.4%). For use of evidence, the mean value of the scale was 21.91 (*SD* = 6.05; range = 7 to 35).

Table 1 *Description of Sample (N = 149)*		
	n	*%*
Occupation		
Nurse	30	20.1
Psychiatrist	35	23.5
Psychologist	23	15.4
Social worker	17	11.4
Occupational therapist	17	11.4
Physician	4	2.7
Specialized educator	6	4.0
Gender		
Female	86	57.7
Male	62	41.6

Table 2   *Frequency of Psychosocial Work Environment Dimensions (N = 149)*

Dimensions	*n*	%
Psychological demand +	75	50.3
Decision latitude –	71	47.7
Social support –	77	52.7
Effort/reward imbalance	52	35.4

+ = high   – = low

Table 3   *Correlation between Psychosocial Work Environment Dimensions and Use of Evidence (N = 137)*

Measure	Use of Evidence	Psycho-logical Demands	Decision Latitude	Social Support	Effort/ Reward Imbalance
Use of evidence	1.0	.03	.32***	.30***	–.01
Psychological demands	.03	1.0	–.11	–.31***	.63****
Decision latitude	.32***	–.11	1.0	.41****	–.25**
Social support	.30***	–.31***	.41****	1.0	–.51****
Effort/reward imbalance	–.01	.63****	–.25**	–.51****	1.0

★ $p < 0.05$ ★★ $p < 0.01$ ★★★ $p < 0.001$ ★★★★ $p < 0.0001$

The correlations revealed a significant relationship between use of evidence and decision latitude ($r = .32$, $p < .001$), as well as between use of evidence and social support ($r = .30$, $p < .001$) (see Table 3). Health professionals who used evidence perceived a high level of decision latitude and reported being supported by colleagues and supervisors. A multivariate analysis of variance was performed to determine whether differences existed between the two institutions on the variables of the present study. Only one significant difference was found ($F(1, 133) = 11.31$, $p < .01$): on average, participants from institution A used less evidence ($M = 20.49$, $SD = 6.34$) than those from institution B ($M = 24.17$, $SD = 4.81$).

Furthermore, a multivariate analysis of variance was performed to determine whether differences existed between nurses and other health professionals on the variables of the present study. Because the groups differed in size (nurses, $n = 30$; other health professionals, $n = 119$), the assumption of equality of variance was checked and found to hold true for each variable. Consequently, regular F-statistics can be reported (Tabachnik & Fidell, 2001). Two significant differences and one marginally significant difference were found. First, on average nurses perceived

significantly lower psychological demands ($M = 22.36$, $SD = 2.86$) than other health professionals ($M = 23.82$, $SD = 3.34$; $F(1,132) = 4.65$, $p < .05$). Second, nurses used significantly less evidence ($M = 19.28$, $SD = 6.18$) than other health professionals ($M = 22.50$, $SD = 5.90$; $F(1,132) = 6.66$, $p < .05$). Finally, nurses tended to perceive less social support from colleagues and superiors ($M = 33.62$, $SD = 3.60$) than other health professionals ($M = 35.07$, $SD = 3.62$; $F(1,132) = 3.65$, $p < .10$). When interpreting these results, it is important to remember that the sample comprised only 30 nurses; this greatly limits our ability to generalize the significant differences found between nurses and other health professionals.

Finally, regression analyses were performed to determine whether the variables (psychological demands, decision latitude, social support, and effort/reward) of the study could predict the use of evidence among health–care providers. Table 4 presents the results of the regression analyses. Because significant differences were found between the two institutions and between nurses and other health professionals on the dependent variable, the use of evidence variable was first regressed on these variables (block 1), in order to control for their influence. In block 2, the use of evidence was regressed onto psychological demands, decision latitude, social support, and the effort/reward ratio (i.e., the independent variables of this study). After controlling for the influence of institution of origin and health profession (nurses vs. other health professionals), perceived social support ($\beta = .27$, $p < .01$) and perceived decision latitude ($\beta = .25$, $p < .01$) were found to positively and significantly predict the use of evidence (see Table 4). Furthermore, the effort/reward ratio tended to positively predict the use of evidence ($\beta = .21$, $p < .10$). Moreover, the addition of the last three predictors to the model predicting the use of evidence added 16.1% explained variance to the 11.3% already explained

Table 4 *Multiple Regression Analyses*		
	β	*p* **Value**
Block 1		
Institution	.28	< .001
Occupation	.22	< .01
Block 2		
Psychological demands	–.03	ns
Decision latitude	.25	< .01
Social support	.27	< .01
Effort/reward imbalance	.21	< .10
ns = not significant		

by the institution of origin and the health profession, for a total of 27.4% of explained variance. We can therefore conclude that, although there are significant differences between the two institutions and between nurses and other health professionals, the psychosocial work environment has a similar impact on the use of evidence by health practitioners in interprofessional groups.

Discussion

The exploratory correlation analysis found significant relationships between social support, decision latitude, and use of evidence. A more thorough investigation of the nature of these relationships in the regression analysis demonstrated that social support and decision latitude were significant predictors of use of evidence. Although there were significant differences between the two organizations and between nurses and other health professionals, the psychosocial environment had a similar impact on the use of evidence among health practitioners.

The first observation to emerge from the data is that social support from colleagues and superiors acts as a predictor of use of evidence. The three components of social support are socio-emotional support or esteem, instrumental support, and hostility or conflict (Karasek, 1985). Several other studies have identified managerial support, peer support, and coaching as strategies for promoting research utilization by nurses (Logan & Davies, 1995; Nilson Kajermo et al., 1998; Royle et al., 1998). In their study with unregulated care providers, Janes, Sidani, Cott, and Rappolt (2008) found that the process of knowledge utilization was enhanced when peer relationships on the unit were collaborative. The link between the utilization of knowledge and workplace relations has been identified in studies of evidence-based health care (Janes et al., 2008; Rycroft-Malone, 2004). Further studies in this area may enhance the conceptualization of knowledge utilization as a social process and make more explicit the link between a healthy workplace and practice excellence (Janes et al., 2008).

Rycroft-Malone (2004) identifies context as a key component promoting the successful implementation of evidence in practice, such as "learning organizations" that create learning cultures where attention is paid to individuals, group processes, and organizational systems. Such contexts are characterized by decentralized decision-making, an emphasis on the relationship between administrators and workers, and transformational leaders (Rycroft-Malone, 2004; Senge, 1990). The second observation to emerge from the data is that decision latitude acts as a predictor of use of evidence. Decision latitude is defined as the ability to use one's qualifications and develop new job skills and as an opportunity to choose how to do one's work and influence related decisions (Karasek, 1985).

In a recent study, Estabrooks et al. (2007) identify facilitation, nurse-to-nurse collaboration, autonomy to determine policy, and procedures and higher context as related to the use of evidence. Some studies have identified lack of sufficient authority to change practices as a barrier to research utilization (Hutchinson & Johnston, 2006; Thompson, Chau, & Lopez, 2006). Leadership that is supportive of teamwork and staff involvement in decision-making have been found to greatly influence research utilization by nurses and others in health-care settings (McCormack et al., 2002).

Limitations

The sample size was acceptable for the statistical analyses reported here, but future research should try to replicate the significant differences found between nurses and other health professionals, since only 30 nurses participated in the present study. This small number of nurses might limit the generalizability of the findings to all nurses. Larger studies in other settings with interdisciplinary teams are still required, in order to further investigate the significance of the psychosocial work environment for how health professionals use evidence in their practice. Caution should therefore be exercised with respect to generalization based on this study.

Conclusion

In a context where knowledge is considered an important competitive advantage, and where the concepts of evidence-based medicine, evidence-based nursing, and evidence-based management have become central to professional practice around the world (Desouza, 2006; Dicenso, Guyatt, & Ciliska, 2005; Keskin, 2005), it is reasonable to assume that larger numbers of workers are turning to evidence in their workplace decision-making. It may therefore be useful to implement strategies that foster social support and decision latitude by health professionals. Future research is needed to develop and test conceptual frameworks, including interprofessional collaboration, to foster the utilization of evidence among health-care workers and investigate the effect of evidence use on patient safety and employee satisfaction.

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Appendix 1   *Evidence Utilization Scale*

Evidence-based *practice means integrating individual clinical expertise with the best available external clinical evidence from systematic research. Evidence-based practice is informed by data from randomized clinical trials as well as systematic reviews, meta-analyses and the consensus of experts. Evidence-based practice also emphasizes the dissemination and use of information so that the evidence reaches clinical practice.*

The following sentences are statements concerning how you use evidence in your practice when evaluating options and making decisions. Circle the number that best represents your answer.

In your practice	POOR	FAIR	GOOD	VERY GOOD	EXCEL-LENT
1. Your *access* to evidence is	1	2	3	4	5
2. Your level of *understanding* of the evidence is	1	2	3	4	5
3. Your capacity to *evaluate the quality* of evidence is	1	2	3	4	5
4. The degree to which you *follow* available evidence is	1	2	3	4	5
5. Your efforts to *share knowledge* about evidence with your colleagues are	1	2	3	4	5
6. Your team's *use* of evidence is	1	2	3	4	5
7. Your ability to *assess* the effects of an evidence-based practice on your clientele is	1	2	3	4	5

Source: Based on the utilization stages described in Knott and Wildavsky (1980) and Landry et al. (2001).