Respectfulness from the Patient Perspective: Comparison of Primary Healthcare Evaluation Instruments

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Abstract

The operational definition of respectfulness is "the extent to which health professionals and support staff meet users' expectations about interpersonal treatment, demonstrate respect for the dignity of patients and provide adequate privacy."

Objective: To examine how well respectfulness is captured in validated instruments that evaluate primary healthcare from the consumer perspective, whether or not their developers had envisaged these as representing respectfulness.

Method: 649 adults with at least one healthcare contact with their own regular doctor or clinic in the previous 12 months responded to instruments that evaluate primary healthcare. Two instruments had subscales that mapped to respectfulness: The Interpersonal Processes of Care (IPC, two subscales) and the Primary Care Assessment Survey (PCAS). Additionally, there were individual respectfulness items in subscales measuring other attributes in the Components of Primary Care Index (CPCI) and the EUROPEP. Scores were normalized for descriptive comparison. Exploratory (principal components) and confirmatory (structural equation) factor analyses examined fit to operational definition.

Results: All subscales are skewed positively. Respectfulness scales correlate highly with each other and with interpersonal communication. All subscales load adequately on a single factor, presumed to be respectfulness, but the best model has three underlying factors corresponding to: 1) physician's interpersonal treatment (eigenvalue = 13.99); 2) interpersonal treatment by office staff (eigenvalue = 2.13), and; 3) respect for the dignity of the person (eigenvalue = 1.16). The IPC Interpersonal Style (Disrespectful Office Staff) captures treatment by staff, only one item in the EUROPEP on wait times in the waiting room captures dignity, and the remaining items capture physician's interpersonal treatment (IPC Interpersonal Style (Compassionate, Respectful), IPC Hurried Communication and PCAS Interpersonal Treatment).

Conclusion: Various items or subscales seem to measure respectfulness among currently available validated instruments. However, many of these items related to other constructs, such as interpersonal communication. Further studies should aim at developing more refined measures – especially for privacy and dignity – and assess the relevance of the broader concept of responsiveness.

Background

In 2000 the World Health Report (WHO 2000) rated the health systems of member countries on the basis of fairness, effectiveness and responsiveness. In this important report, responsiveness was defined as "the extent to which non-medical expectations of patients are met" This report highlighted the importance of meeting patients' expectations, effectively and equitably, regarding *what* care they should receive and *when*, and of *how* care should be provided to populations. More specific to primary healthcare (PHC), a recent Canadian study identified responsiveness as one of the six domains important to the public (Wong et al. 2008).

In 2004, we conducted a consensus consultation of 19 PHC experts across Canada to formulate operational definitions of attributes of primary healthcare that should be evaluated in health reforms (Haggerty J et al., 2007; Haggerty et al., 2007). Reflecting the WHO report, responsiveness was identified as one of the attributes to be measured. However, when mapped to validated instruments, the WHO's definition of responsiveness proved to be very broad and tended to include many other attributes, such as interpersonal communication and relational continuity between providers and patients. Clearly, that definition of responsiveness encompassed much more than a description of how care was provided and overlapped other clinical aspects of care which seemed better assessed separately.

In addition, conceptualizing responsiveness as the ability to respond to a broad range of needs expressed by the patient did not seem specific enough for evaluative purposes. Consequently, the PHC experts narrowed the concept to reduce conceptual overlap and pinpointed "respectfulness" as fitting more specifically with *how* providers respond to patients' expectations, leaving aside aspects related to the range of services available and timeliness in responding to patients needs. In purely linguistic terms, responsiveness is related to the quality of reacting or responding quickly, whereas respectfulness relates to the quality of being courteous, humble, reverent and deferential (Canadian Oxford Dictionary 1998).

Defining and measuring respectfulness

The operational definition of respectfulness on which the experts agreed was: "the extent to which health professionals and support staff meet users' expectations about interpersonal treatment, demonstrate respect for the dignity of patients and provide adequate privacy." Although respectfulness is a characteristic of all healthcare, this definition was considered to be central to PHC. The experts agreed unanimously that this attribute is most validly evaluated from the patient perspective. Having a clear operational definition of respectfulness is a first step in devising or assessing a measurement strategy to evaluate how well it is achieved in the health system.

Various instruments have been developed to evaluate primary healthcare from the user perspective. As might be expected, some address aspects related to respectfulness, although respectfulness as a construct is addressed only by one instrument, to our knowledge. Currently, there is little comparative information to guide evaluators in their selection of the appropriate tool for evaluating respectfulness of care.

In this paper, we present and discuss results from a concurrent validation process of existing instruments that assess primary healthcare from the patient perspective, with regards to the evaluation of respectfulness. More specifically, our objectives were to contribute to the

understanding of the concept of respectfulness, given the lack of instruments available to measure it, and to explore how validated instruments' items could be linked with factors that could be mapped to our operational definition. Our aim was to discern the extent to which this dimension was captured in the various validated instruments, whether or not the instruments' developers had envisaged these as representing respectfulness.

Method

Measure selection

We identified 13 unique instruments that measure the experience with primary healthcare services from the consumer perspective and selected six that were relevant for use in Canada. Among the six instruments, two had subscales that mapped to our operational definition of respectfulness. The Interpersonal Processes of Care – Version II (IPC) had two: Interpersonal Style (Compassionate, Respectful) and Interpersonal Style (Disrespectful Office Staff). The Primary Care Assessment Survey (PCAS) (Safran et al. 1998) had one subscale, Interpersonal Treatment. Additionally, there were individual items that assessed aspects of respectfulness in subscales measuring other attributes, notably in the Components of Primary Care Index (CPCI) (Flocke 1997), in the European instrument (EUROPEP) (Grol et al. 2000) and in other subscales of the IPC (Stewart et al. 1999). Based on our operational definition, we selected items by judging whether they suggested that the person is important and that attention is to be focused on the patient.

No items or subscales directly addressed the provision of privacy, which was part of the operational definition and can be defined as the ability to seclude and reveal oneself selectively. The EUROPEP instrument addresses the notion of confidentiality of personal information. There was also considerable conceptual overlap with the concepts of interpersonal communication skills (ability to elicit and understand the patient's concerns) and trust. Although items from the PCAS Trust subscale were initially included in the respectfulness analyses, these items were later excluded for being an outcome of care rather than an attribute of primary healthcare per se. In all, we retained 25 items (including three complete subscales) for analysis.

Concurrent validation of instruments

We administered the six instruments to persons who had sought healthcare at their regular source in the previous 12 months. Our sample was equally balanced by experience of healthcare, educational level, urban/rural context and French/English language. Prior experience of primary healthcare was categorized using a single screening question: "Overall, has your experience of care from your regular family doctor or medical clinic been excellent, poor, or average?"

Analytic strategy

Our strategy for analyzing respectfulness differed from that used for other attributes of care in this study. We departed from our overall strategy of honouring the subscales that had been validated by the instrument developers and included individual items from other subscales that mapped to our operational definition. Our goal was to explore the extent to which the sub-dimensions in our operational definition were addressed in both subscales and items.

However, for specific psychometric analyses we used our common methodology. We produced descriptive statistics for all the items in the subscales, specifically looking for items with many

missing values and for ceiling or floor effects in the distribution of values. To compare subscale scores between instruments, we expressed the score of each subscale as the mean of the component items, so that the magnitude of the score reflected the values in the response scale but was not affected by the number of items in the subscale.

Second, we explored the construct properties of the subscales using factor analyses, as detailed elsewhere (Santor et al., 2009). We first conducted an exploratory principal components analysis with SAS 9.1 (SAS Institute, 2003), using an oblique rotation to explore how well all the items loaded on a single factor and to identify how many underlying factors accounted for variability in responses, using the criterion of eigenvalues >1. We then did confirmatory factor analysis with structural equation modelling to evaluate the suitability of the factor structure identified through the exploratory factor analysis. We assigned items to factors or underlying sub-dimensions based on the exploratory factor analysis or, for items with ambiguous loadings, based on our judgment of fit with the operational definition. We used as the reference item the one with the highest principal components loading and apparent content fit with the latent variable.

Results

Our effective sample size for factor analysis was reduced from 645 to 519 because respondents with a missing value on any item were excluded from the analysis. Table 1 compares those included and excluded from factor analyses. Compared to those included in the factor analysis, those excluded because of missing data were more likely to be older and to report being affiliated to a clinic rather than to a personal physician. Excluded participants did not differ significantly from included participants in their overall experience of care.

Table 1
Characteristics of the study sample and comparison of included and excluded subjects as a result of missing values on any of the 25 items addressing respectfulness.

Characteristic	Total (n = 645)	Missing values: No missing/ included (n= 519)	Missing values: Any missing/ excluded (n= 126)	Test for Difference
Personal characteristics				
Mean age (SD)	47.9 (14.8)	47.1 (14.5)	51.3 (15.7)	t = 2.86 p = 0.004
Per cent female	64.6% (414)	65.0% (335)	63.2% (79)	X^2 = 0.15; 1 *df* p = 0.69
Per cent indicating health status as good or excellent	37.6% (240)	37.8% (194)	37.1% (46)	X^2 = 0.02; 1 *df* p = 0.88
Per cent with disability	31.5% (200)	30.7% (157)	34.9% (43)	X^2 = 0.82; 1 *df*

Characteristic	Total (n = 645)	Missing values: No missing/ included (n= 519)	Missing values: Any missing/ excluded (n= 126)	Test for Difference
Per cent with chronic health problem*	59.7% (379)	59.7% (307)	60.0% (72)	p = 0.36 X^2 = 0.003; 1 *df* p = 0.95
Healthcare use				
Overall experience of care				
Poor	23.1% (149)	21.9% (114)	27.7% (35)	
Average	35.9% (232)	36.4% (189)	34.1% (43)	X^2 = 1.93; 2 *df*
Excellent	40.9% (264)	41.6% (216)	38.1% (48)	p = 0.37
Regular provider:				
Physician	94.1% (607)	95.1% (494)	89.6% (113)	X^2 =5.53; 1 *df*
Clinic only	5.8% (38)	4.8% (25)	10.3% (13)	p = 0.018
Mean number of years of affiliation (SD)	11.1 (9)	11.3 (8.7)	10.6 (7.1)	t = -0.76; p = 0.41
Mean number of primary care visits in previous 12 months (SD)	6.2 (6.9)	6.4 (6.6)	5.6 (5.7)	t = -1.11; p = 0.26
Per cent of visits to regular provider	88.8 (48.9)	87.2 (40.4)	95.7 (74.7)	t = 1.65; p = 0.09
Mean number of unique general or family physicians seen (SD)	1.9 (1.3)	1.9 (1.3)	1.8 (1.2)	t = -0.81; p = 0.41

Comparative descriptive statistics

The distribution of the responses to each item is presented in Table 2. Despite our design that specifically over-sampled persons with a negative experience of care, many item distributions are skewed positively, with the vast majority of respondents selecting the two highest response options and very few the lowest options. This is a well-known bias in the evaluation of experience of care by patients and may compromise the performance of exploratory factor analysis based on ordinary least squares regression techniques.

* Per cent indicating they had been told by a doctor that they had any of the following: high blood pressure, diabetes, cancer, depression, arthritis, respiratory disease, heart disease.

Table 2
Distribution of responses to items in subscales mapped to respectfulness of primary healthcare services. (n = 645)

Item Code	Item Statement	Missing % (n)	Per cent (number) by response option					
PCAS Organizational Access			**1=Very poor**	**2**	**3**	**4**	**5**	**6=Excellent**
PS_oa4	How would you rate the amount of time you **wait** at your doctor's office for your appointment to **start**?	2 (10)	5 (34)	12 (80)	27 (177)	29 (190)	16 (106)	7 (48)
PCAS Communication			**1=Very poor**	**2**	**3**	**4**	**5**	**6=Excellent**
PS_c2	Thinking about **talking** with your regular doctor, how would you rate the **attention** your doctor gives to what you have to say?	1 (5)	1 (7)	4 (26)	11 (74)	22 (143)	29 (188)	31 (202)
PCAS Interpersonal Treatment			**1=Very poor**	**2**	**3**	**4**	**5**	**6=Excellent**
PS_it1	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate the amount of **time** your doctor spends with you?	1 (4)	1 (9)	5 (32)	16 (104)	27 (177)	28 (178)	22 (141)
PS_it2	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **patience** with your questions or worries?	1 (5)	0 (3)	3 (19)	13 (85)	23 (150)	28 (178)	32 (205)
PS_it3	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **friendliness and warmth** toward you?	0 (3)	1 (8)	3 (21)	9 (57)	24 (155)	27 (176)	35 (225)
PS_it4	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **caring and concern** for you?	1 (4)	0 (3)	4 (25)	10 (67)	25 (158)	27 (174)	33 (214)

Item Code	Item Statement	Missing % (n)	Per cent (number) by response option					
PS_it5	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **respect** for you?	1 (6)	1 (8)	2 (11)	6 (41)	22 (139)	28 (183)	40 (257)
CPCI Interpersonal Communication			**1=Very poor**	**2**	**3**	**4**	**5**	**6=Excellent**
CP_ic2 Reversed	Sometimes, this doctor does not listen to me.	2 (15)	5 (34)	7 (48)	9 (55)	7 (47)	17 (107)	53 (339)
CP_ic6 Reversed	Sometimes, I feel like this doctor ignores my concerns.	3 (19)	6 (36)	7 (45)	9 (55)	9 (56)	18 (119)	49 (315)
EUROPEP Clinical Behaviour								
EU_cb6	Keeping your records and data confidential	3 (19)		1 (5)	5 (31)	23 (147)	66 (425)	3 (18)
EUROPEP Organisation of Care								
EU_oa2	The helpfulness of staff (other than the doctor)	5 (29)	3 (18)	6 (39)	15 (98)	30 (192)	37 (236)	5 (33)
EU_oa6	Waiting time in the waiting room	4 (25)	14 (91)	12 (75)	24 (156)	30 (192)	15 (99)	1 (7)
IPC Hurried Communication			**1=Always**	**2**	**3**	**4**	**5=Never**	
IP_hc3 Reversed	How often did the doctor(s) ignore what you told them?	4 (24)	1 (8)	3 (21)	14 (88)	32 (204)	47 (300)	
IP_hc4 Reversed	How often did the doctor(s) appear to be distracted when they were with you?	4 (24)	1 (9)	4 (23)	12 (75)	36 (230)	44 (284)	
IP_hc5 Reversed	How often did the doctor(s) seem bothered if you asked several questions?	4 (26)	1 (8)	5 (31)	12 (79)	26 (168)	52 (333)	
IPC Communication(Elicited concerns, responded)			**1=Never**	**2**	**3**	**4**	**5=Always**	
IP_cel3	How often did the doctor(s) take your health concerns very seriously?	3 (22)	1 (9)	5 (31)	10 (62)	32 (207)	49 (314)	
IPC Interpersonal Style (Compassionate, Respectful)			**1=Never**	**2**	**3**	**4**	**5=Always**	
IP_isc1	How often did the doctor(s) really respect you as a person?	4 (23)	1 (5)	3 (18)	5 (35)	25 (159)	63 (405)	

Item Code	Item Statement	Missing % (n)	Per cent (number) by response option				
IP_isc2	How often did the doctor(s) treat you as an equal?	4 (26)	3 (17)	4 (27)	9 (61)	29 (186)	51 (328)
IP_isc3	How often was the doctor(s) compassionate?	4 (24)	3 (18)	7 (47)	11 (69)	27 (173)	49 (314)
IP_isc4	How often did the doctor(s) give you support and encouragement?	4 (25)	2 (15)	9 (57)	14 (91)	23 (147)	48 (310)
IP_isc5	How often were the doctor(s) concerned about your feelings?	3 (22)	3 (22)	10 (62)	14 (89)	25 (160)	45 (290)
IPC Interpersonal Style (Disrespectful Office Staff)			**1=Always**	**2**	**3**	**4**	**5=Never**
IP_isd1 Reversed	How often were office staff rude to you?	3 (20)	0 (3)	2 (12)	13 (85)	20 (131)	61 (394)
IP_isd2 Reversed	How often did office staff talk down to you?	3 (20)	1 (5)	2 (15)	10 (62)	21 (136)	63 (407)
IP_isd3 Reversed	How often did office staff give you a hard time?	3 (20)	0 (3)	2 (11)	7 (46)	18 (115)	70 (450)
IP_isd4 Reversed	How often did office staff have a negative attitude toward you?	3 (21)	1 (5)	1 (8)	11 (71)	17 (110)	67 (430)

Table 3 presents the Pearson correlations among the three subscales that had been validated to capture respectfulness. We include the correlation for IPC Hurried Communication because three of the five items were mapped to respectfulness. The correlations show that while subscales measuring physician respectfulness are highly correlated among themselves, these subscales do not correlate highly with the subscale for office staff respectfulness, suggesting that these are distinct constructs. To explore the extent to which respectfulness was distinct from or similar to other attributes, we calculated the mean of the correlations between each respectfulness subscale and the subscales from the other attributes (Table 3). The mean correlations confirm that respectfulness subscales correlate with interpersonal communication. This could either be a true correlation between distinct constructs (two constructs that tend to move in similar directions) or suggest a conceptual overlap between respectfulness and interpersonal communications (not truly distinct constructs).

Table 3
Mean partial correlations between respectfulness subscales

Respectfulness subscales	Respectfulness: PCAS Interpersonal Treatment	Respectfulness: IPC Hurried Communication	Respectfulness: IPC Interpersonal Style (Compassionate, respectful)	Respectfulness: IPC Interpersonal Style (Disrespectful office staff)
Respectfulness: PCAS Interpersonal Treatment	1.000	0.64	0.68	0.272
Respectfulness: IPC Hurried Communication	0.64	1.000	0.69	0.32
Respectfulness: IPC Interpersonal Style (Compassionate, respectful)	0.68	0.691	1.000	0.30
Respectfulness: IPC Interpersonal Style (Disrespectful office staff)	0.27	0.32	0.30	1.000
Questionnaire subscale				
Accessibility (Mean)	0.35	0.36	0.32	0.27
Comprehensiveness of services (Mean)	0.32	0.33	0.37	0.18
Relational Continuity (Mean)	0.45	0.40	0.44	0.23
Interpersonal Communication (Mean)	0.65	0.61	0.65	0.28

Construct validity: fit with operational definitions

Although most of the items loaded reasonably well (loading > 0.30) onto a single latent variable using principal components (results available upon request), the scree plots suggested that a three-factor model presented the best fit with our data. The results of the exploratory factor analysis are presented in Table 4. Based on our operational definition, we judged that the first factor (eigenvalue = 13.99) is a reflection of "physician's interpersonal treatment" (interpersonal treatment), the second factor (eigenvalue = 2.13) is a reflection of "interpersonal treatment by office staff" (office staff) and the third factor (eigenvalue = 1.16) is related to "respect for the dignity of the person" (dignity). The EUROPEP rating of confidential treatment of the medical record loaded only moderately on interpersonal treatment, and the research team decided that it related conceptually to respect for the dignity of the person.

Table 4
Results of exploratory analysis showing factor loadings (> 0.40 only) of items using principal components analysis with oblique rotation (n = 519).

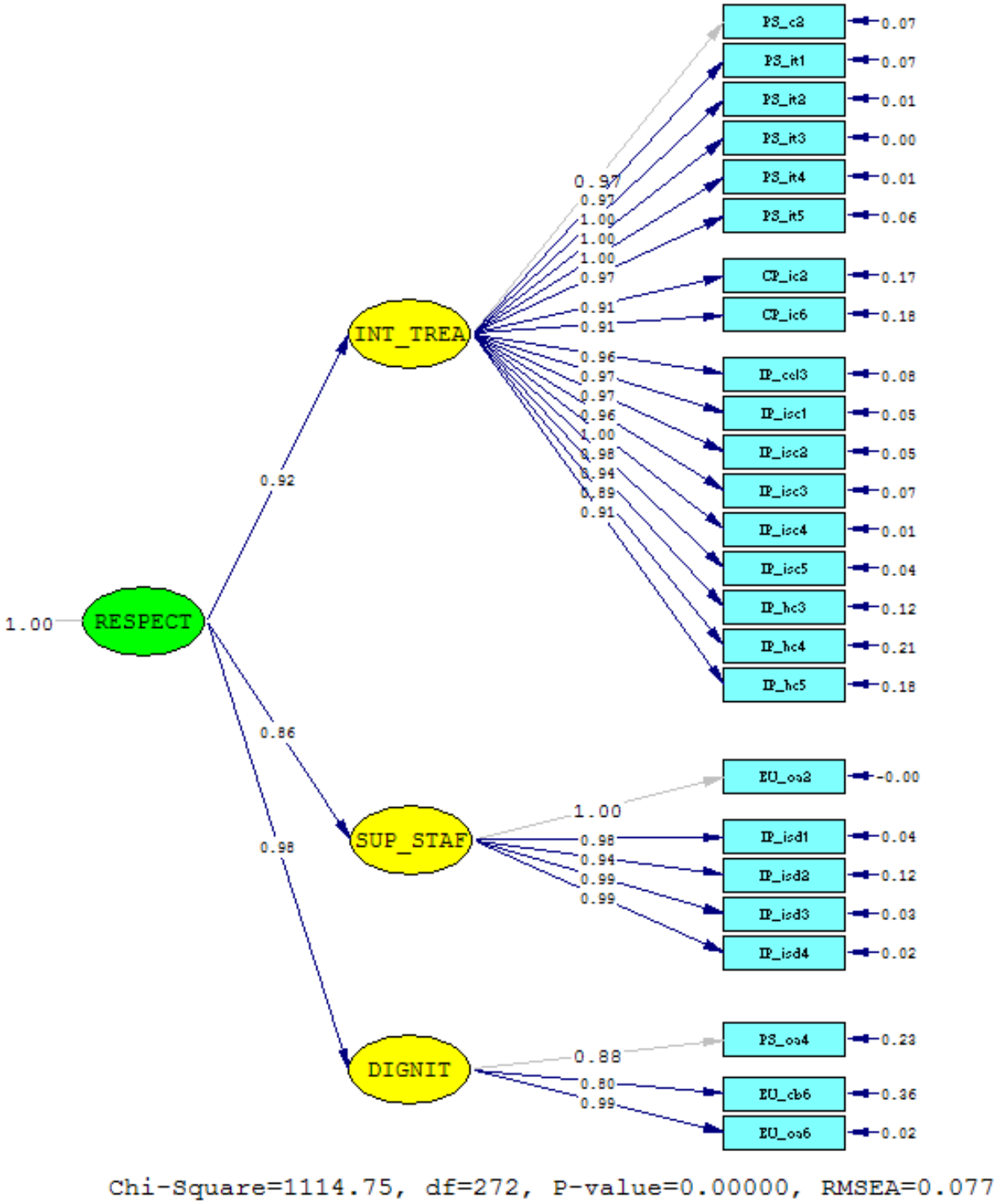
Item Code	Item Statement	Factors		
		Interpersonal treatment eigenvalue=13.99 loading	**Office Staff** eigenvalue=2.13 loading	**Dignity** eigenvalue=1.16 loading
PS_oa4	How would you rate the amount of time you **wait** at your doctor's office for your appointment to **start**?	—	—	0.84
PS_c2	Thinking about **talking** with your regular doctor, how would you rate the **attention** your doctor gives to what you have to say?	0.83	—	—
PS_it1	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate the amount of **time** your doctor spends with you?	0.77	—	—
PS_it2	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **patience** with your questions or worries?	0.87	—	—
PS_it3	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **friendliness and warmth** toward you?	0.86	—	—
PS_it4	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **caring and concern** for you?	0.89	—	—
PS_it5	Thinking about the **personal aspects** of the care you receive from your regular doctor, how would you rate doctor's **respect** for you?	0.83	—	—
CP_ic2	Sometimes, this doctor does not listen to me.	0.72	—	—
CP_ic6	Sometimes, I feel like this doctor ignores my concerns.	0.69	—	—
EU_oa2	The helpfulness of staff (other than the doctor)	—	0.52	—
EU_oa6	Waiting time in the waiting room	—	—	0.81
EU_cb6	Keeping your records and data confidential	0.47	—	— †
IP_cel3	How often did the doctor(s) take your health concerns very seriously?	0.70	—	—
IP_hc3	How often did the doctor(s) ignore what you told them?	0.69	—	—
IP_hc4	How often did the doctor(s) appear to be distracted when they were with you?	0.62	—	—

Item Code	Item Statement	Factors		
		Interpersonal treatment eigenvalue=13.99	**Office Staff** eigenvalue=2.13	**Dignity** eigenvalue=1.16
		loading	loading	loading
IP_hc5	How often did the doctor(s) seem bothered if you asked several questions?	0.75	—	—
IP_isc1	How often did the doctor(s) really respect you as a person?	0.81	—	—
IP_isc2	How often did the doctor(s) treat you as an equal?	0.81	—	—
IP_isc3	How often was the doctor(s) compassionate?	0.83	—	—
IP_isc4	How often did the doctor(s) give you support and encouragement?	0.87	—	—
IP_isc5	How often were the doctor(s) concerned about your feelings?	0.84	—	—
IP_isd1	How often were office staff rude to you?	—	0.87	—
IP_isd2	How often did office staff talk down to you?	—	0.81	—
IP_isd3	How often did office staff give you a hard time?	—	0.92	—
IP_isd4	How often did office staff have a negative attitude toward you?	—	0.93	—

† For confirmatory analysis, items were associated with highest loading factors unless indicated by "†", where expert judgment prevailed.

We used structural equation modelling to examine the goodness of fit of the models. As described in the analytical overview (Santor et al. 2009), we evaluated different models against the standard unidimensional model in which all items, irrespective of original instrument, are associated with a single latent variable. We assessed goodness-of-fit statistics for the standard unidimensional model and a model in which the items are associated with the three sub-dimensions that emerged from the operational definition as a first-order factor, and these were subsequently subsumed in a second-order factor representing respectfulness. The goodness-of-fit statistics are better in the model that includes the three sub-dimensions (χ^2 = 1287-1115 = 172.3 df, $p < 0.001$). The dimensions of interpersonal treatment and dignity are highly correlated (0.91), but office staff has much lower correlations with these two dimensions (0.70. and 0.85 respectively). The model and loadings of items are presented in Figure 1.

Figure 1
Parameter estimations for a structural equation model showing item loadings of items on proposed sub-dimensions (1st order variables) that are subsumed on the latent factor assumed to be respectfulness (Model 2, Table 5)



Discussion and Conclusion

Capacity to measure respectfulness

We were able to find many items from validated instruments that seemed to measure respectfulness. Our analyses confirm that these items do seem to relate to a limited set of constructs. In fact, 18 of the 25 identified items loaded on the same factor in the exploratory analysis. Confirmatory analyses support a common underlying construct. However, from the subscale developers' point of view, many of these items are related to other constructs such as interpersonal communication and relational continuity. Indeed, the various experience-of-care constructs seem to correlate, and this could be emerging from a common latent construct. However, this also raises the possibility that experience of care in general relates to many different latent constructs and that the same set of variables could capture different constructs depending on the theoretical perspective adopted to subdivide the overarching concept of experience of care.

Our analyses demonstrate that the three subscales measuring respectfulness available from primary care evaluation instruments do correlate. Interpersonal treatment and interpersonal style of communication seem to be part of the same construct. However, respectfulness of the staff is a separate entity. This could come from the fact that a different object of evaluation is the subject in these subscales (e.g. the physician rather than the office staff). Although our conceptual mapping placed waiting times as a measure of respectfulness, our analysis suggests that this item is separate from other constructs of respectfulness and is probably a measure of accessibility.

In addition, various items related to communication in general load in the same construct as respectfulness subscales. This is in line with the overall correlation of respectfulness with other subscales of communication. It is to be noted that among the items in the main factor for respectfulness, those from the two subscales designed to assess physician respectfulness load the strongest and that items from the interpersonal communication subscales do load on this factor, but not as strongly. However, items loading well in subscales of interpersonal communication, when introduced into respectfulness scales based on the judgment of experts, load well with respectfulness. Communication is probably the best way to show respect, and miscommunication could generate mistrust and feelings of not being respected or important. This was in fact the conceptual basis for selecting items. Communication items related only to the fact that the doctor communicates well were not selected.

Interpersonal process of care, patient-centred care and responsiveness as broad constructs

Our results suggest that interpersonal aspects of care have fuzzy boundaries and are probably difficult for people to distinguish. Overall, "my doctor is good and caring" might be the blanket statement that will correlate with his communication skills, manners, and human interaction with the patient. The implication here for measurement seems to be that concepts that are strongly related to the level of affiliation between patient and doctor are fraught with uncertainty and halo effects, which probably impedes the clear-cut separation of concepts. Is the doctor disrespectful, or a poor communicator? Is the doctor respectful, but not involved in a human manner (appropriate but cold)? Our analyses suggest that respectfulness captures a wide array of the interpersonal aspects of care, and we found that among all the attributes measured, the respectfulness subscales discriminate most strongly between poor, average and excellent overall

experience of care (Haggerty et al. 2009). This could somehow advocate for a measure of overall responsiveness, as suggested by WHO in their framework of performance assessment, rather than the more specific concept of respectfulness. Still, such a broad concept remains difficult to measure and to link with specific improvement activities.

More recently, patient-centred care has been suggested as one essential quality of PHC and has been defined as encompassing aspects of providing care that is respectful and responsive to individual preferences, thus combining into a single concept the notion of respectfulness and responsiveness (Institute of Medicine 2001). This concept can also be useful in assessing notions of privacy and dignity, which do not seem to be captured by current instruments that assess respectfulness. This could be the object of further development of indices measuring patient-centred care, thus going beyond respectfulness while retaining more focus than with the broad, non-specific concept of responsiveness.

Limitations and strengths of the study

This study suffers from certain limitations. We limited our analyses to validated instruments available in the public domain. Other instruments with various levels of validation or previous utilization exist as well and could capture some aspects related to the concept of respectfulness, such as the QUOTE questionnaire (Groenewegen et al. 2005; Kerssens et al. 2004), the Commonwealth Fund Health Care Quality Survey (Blanchard and Lurie 2004). Therefore, our results apply solely to these most commonly used instruments of PHC evaluation.

We used attributes developed by a panel of recognized Canadian experts. While this Delphi process produced consensus among experts sharing a common understanding of PHC and its desired outcomes in the Canadian context (increase in the internal validity of the results), it also reduced the generalizability of the results to other contexts (decrease in external validity). However, one could argue that no real essential attributes of PHC exist above and beyond specific contexts and that involving experts from various settings could have resulted in the identified attributes not being desirable for any real contexts.

Finally, we did not intend to assess respectfulness as a concept from the start. It was suggested by the operational definitions developed by the experts. These analyses represent a first assessment of the coverage and properties of items and subscales that could capture respectfulness in PHC settings. Further studies should aim at better evaluating tools and instruments for their capacity to evaluate respectfulness, develop more refined measures and assess the relevance of the broader concept of responsiveness.

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