Research paper

Psychosexual problems in general practice: measuring consultation competence using two different measures

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ABSTRACT

Background Psychosexual problems are a common presentation in general practice. Given that the cornerstone of assessment is excellent consultations skills, it may be assumed that general practitioners (GPs) will perform skilfully for such presentations.

Aim To determine if there is a significant difference in consultation skills assessed using a generic test of consultation performance compared to one which has been specifically developed for experts in psychosexual care, albeit modified for general practice consultations.

Methods Six GPs were video recorded consulting six standardised patients at their respective practices. Two assessors independently rated the consultation performance using the Leicester Assessment Package (LAP), a generic tool to assess GP consultation performance. Four sexologists, blind to the review by the LAP assessors, assessed the same consultations deploying the Permission, Limited Information, Specific Suggestion, Intensive Therapy (PLISSIT) framework. The PLISSIT is routinely used to teach health professionals communication skills when consulting people with psychosexual problems.

Results Thirty-four consultations were successfully recorded. The mean duration of consultations was 12 minutes and 10 seconds (range 7 m. 54 s. to 16 m. 54 s.). Three GPs differed significantly in core competencies as measured by the LAP. Similarly, three GPs differed in competencies as measured by the PLISSIT. There were significant differences in mean LAP scores and PLISSIT scores observed for different doctors. Mean LAP scores varied by actor–scenario after adjusting for doctor clustering, whereas PLISSIT scoring did not vary significantly by actor–scenario in this small study with limited power. There was no evidence that mean LAP scores were associated with PLISSIT scores.

Conclusions Two measures of consultation competence revealed different outcomes when applied to the same consultations. We found evidence that general practitioners vary significantly on different measures of consultation competence when consulting patients with psychosexual problems in the context of a cancer diagnosis.

Keywords: cancer, consultation skills, psychosexual problems

How this fits in with quality in primary care

What do we know?
Psychosexual problems are a common presentation in general practice. Consulting patients with psychosexual problems requires excellent consultation skills which can be assessed using a variety of different measures.

What does this paper add?
General practitioners' (GPs') consultation skills may vary significantly depending on how they are measured. These data are a prelude to developing interventions that may be helpful for GPs and other healthcare professionals when consulted by patients with psychosexual problems.

Introduction

One in four Australians will develop cancer before the age of 75 years.[1] Most patients will survive and eventually die of a condition unrelated to cancer. The trajectory through the illness will be punctuated by surgery, chemotherapy and radiotherapy which in some cases will impact on sexual function. Many people will be supported during their illness by an intimate partner. During treatment those couples who have stopped being sexually active may be ambivalent about the prospects of a return to sexual relationships once treatment is complete. Previous studies have reported that cancer patients are often fearful about resuming intimate relationships because they are unsure whether they will be able to perform, if there will be pain and whether they are still attractive to their partner because of the effect of the cancer and/or treatment.[2,3] It has been suggested that people with cancer should be encouraged to consult their doctors about problems with sexual function.[4] However, people report difficulties communicating their sexual problems to doctors especially within the context of a cancer diagnosis.[5–7] To our knowledge we are the first to investigate how doctors score on two different measures of consultation competence when consulted by patients with sexual problems.

There are an estimated 100 million consultations with GPs in Australia annually.[8] Most consultations last no more than 15 minutes and may involve dealing with multiple problems. Therefore it is important that the doctors have the expertise to communicate effectively and determine how the patient can be best supported or treated. Viewing the consultation through Watson's 'caring lens', a critical element for the outcome of the consultation is the quality of the interaction between the patient and the care giver, in this case the GP. The doctor must exhibit empathy and a willingness to consider the problem from the patient's perspective.[9–11] Second, when doctors are distracted by multiple problems presented at a single consultation, especially when one of these is a potentially life-limiting condition, they may fail to effectively address other issues which are also a priority for the patient.[12]

The aim of this study was to determine if there is a significant difference in consultation skills assessed using a generic test of consultation performance and one which has been specifically developed for experts in psychosexual care, albeit modified for general practice consultations.

Methods

Design

In this study we are building on lessons learned from conducting recorded standardised patient consultations, as reported previously in this journal.[13] The study involved video recorded consultations with general practitioners, in which five out of six actors portrayed people with cancer. One case did not involve a cancer diagnosis in order to introduce variety among the cases presented. The consultations took place on the premises of the participating general practitioners in Perth, Western Australia. Patients presented in the same order to each practitioner.

Actor patients

The scenarios were developed by the members of the team and are outlined in Box 1. Physical signs, presented as descriptions, were available if the GP proposed relevant physical examination. Therefore no actor was subjected to a physical examination during the study. Patients were amateur actors trained to portray the relevant case. A brief medical record with the relevant past medical history was prepared for each patient and was available to the GP. The GPs were aware that the 'patient' presenting to their clinic was an actor.

Box 1 Scenarios

1 45-year-old married man. Wife had endometrial cancer treated by pelvic clearance and radiation therapy. She is now menopausal. Patient requests a prescription for Sildenafil. Consultation where only one sexual partner consults but treatment may impact on both.

2 65-year-old female diagnosed with metastatic vulval cancer. Following therapy she now has significant scarring, vaginal stenosis and severe swelling of both legs. She is receiving palliative care. She attends to discuss her husband's sexual needs. Consultation in which other than penetrative sexual intercourse could be discussed.

3 45-year-old widow had cervical cancer treated two years ago, including radiotherapy. She has recently become involved in a new relationship with a male partner. She has not been sexually active since her husband's death. She attempted sexual intercourse with her new partner but had to stop because it was too painful. Consultation in which the side effects of radiotherapy impact on sexual function.

4 65-year-old male, homosexual. Diagnosed with prostate cancer six weeks ago and listed for a radical prostatectomy in two weeks' time. Attends with concern about the impact of prostatectomy on sexual performance. Consultation about the potential impact of prostate surgery on sexual performance within the context of other than heterosexual practice.

5 34-year-old female with young family. Despite prophylactic treatment for migraine headaches, as prescribed by a neurologist, she continues to suffer from troublesome headaches which are interfering with her sexual relationship. Consultation in which an unsatisfactory relationship is probably manifesting as somatic symptoms in respect to sexual function.

6 32-year-old male, fit married man. Diagnosed with testicular cancer in 2007 and had a unilateral orchidectomy. Now experiencing impotence despite normal early morning erection. Consultation about impact of male performance anxiety in the context of treated testicular cancer.

Consultations

Six GPs were invited to consult with the actor-patients as though the person had previously visited the practice for one or two ongoing medical problems – brief medical records were provided. The practitioners were allowed up to 15 minutes per consultation as per routine practice in Australia. The scenarios were presented to the practitioners as consecutive cases. GPs were asked to make clinical notes and outline any management plan in as much detail as they would in their practice. GPs were informed that the study involved patients presenting 'intimate relationship problems'.

Quality of consultation

The Leicester Assessment Package (LAP) is an established measure of quality in general practice consultations. With training, general practitioners can use the LAP framework to assess a doctor in various categories of competence in communicating with patients and offering a management plan for the problems presented. Its validity has been confirmed for general practice consultations.[14] Five of the seven LAP categories of consultation competence (interviewing and history taking, problem solving and patient management, anticipatory care and behaviour/relationship with patients) were assessed in this study. The recordings were independently reviewed by two general practitioners (COS and MJ). The team had previously assessed consultations using the LAP.[15,16] The scores were then compared and the final scores represented the consensus view on the quality of the consultations. This method is consistent with how consultations are assessed during professional examinations. The competencies of the six GPs in this study were compared to those of practitioners participating in a similar study with standardised patients, which was also scored using the LAP.[16]

The PLISSIT framework

Annon introduced the PLISSIT framework to guide practitioners on the most effective strategies when discussing sexual issues and to facilitate communication when there is a need to refer for more specialised treatment/assessment.[17] The application of the PLISSIT framework has previously been shown to be beneficial to patients.[18] Several authors have extended or adapted the framework of PLISSIT to more accurately assist in the assessment and treatment of specific difficulties.[19,20] For the purposes of this study four trained sexual health counsellors, including one who was a GP, assessed the consultations using the PLISSIT framework. The four counsellors reviewed the consultations independently and compared their scores with colleagues. Discrepancies were discussed and a final score was agreed as a measure of the

performance of the doctor in each of the four domains, weighted for their opinion about the importance of each domain. The four components of the framework are summarised as follows.

1 Permission
Many people experiencing sexual dysfunction may be reluctant to discuss details of their sexuality in a medical consultation. It is helpful to communicate that the practitioner is open to discussion of what may be perceived to be an embarrassing problem. The counsellor is encouraged to demonstrate active listening and provide acknowledgement, support and reassurance. This domain of the PLISSIT is consistent with history taking as assessed by the LAP. The assessors in this study weighted this element of competence highest on the PLISSIT scoring schedule (Table 1).

Table 1 Guide for scoring the consultations using the PLISSIT framework

Domain	Potential score (higher scores imply better performance)
Permission	0 to 35
Limited Information	0 to 30
Specific Suggestions	0 to 30
Intensive Therapy	-4 to 1*

* The assessors weighted 'Intensive therapy' on a range of scores from -4 (implying very inappropriate advice) to 1 (very appropriate advice). As the consultations were not held within the context of a sexology clinic this element was given a minimal weighting by the experts and skewed to negative scores because in most cases the aim of the GP consultation was not to provide therapy

2 Limited Information
Patients with sexual health problems may be harbouring misconceptions about the extent to which the problems they are experiencing are common to others. This may inhibit disclosure about the nature of the problem. Those advising patients are encouraged to give 'limited information' in order to encourage further disclosure of what the patient may consider embarrassing details. This information serves to provide a level of normalisation, dispel misconceptions and to lead to the sharing of accurate information. This is also consistent with history taking and problem solving as assessed in the LAP.

3 Specific Suggestion
The practitioner is encouraged to provide specific suggestions to address the problems. These suggestions range from what the patient can do for themselves and

may include pharmacological and/or psychological interventions (e.g. prescriptions, exercise, multimedia aids). This is consistent with the problem solving domain assessed in the LAP.

4 Intensive Therapy
The practitioner must demonstrate skill in offering specialised assessment or treatment. This element of the framework requires particular expertise in the management of human sexual dysfunction. The psychosexual counsellors deemed this component to be much less important in the general practice consultation as it was considered inappropriate for a general practitioner to be engaged in 'Intensive Therapy' within the 15 minutes available and on the first occasion that the patient presented the problem. This element was weighted least on the overall assessment, as shown in Table 1.

Statistical analysis

The mean LAP and PLISSIT scores were estimated by the two sets of assessors for each doctor. The differences in mean scores between individual doctors were estimated in a standard unadjusted linear regression model. Intraclass correlation coefficients were used to indicate whether there was a high degree of correlation of doctor LAP and PLISSIT scores. In order to determine whether the mean LAP and PLISSIT scores varied according to each of the actor-patient scenarios, generalised estimating equations were used to fit a linear model actor-patient scenario as the single independent variable. Robust standard errors with a small sample adjustment and clustered on the doctor were estimated. The small sample size of this study resulted in sufficient power to test for only large differences in the mean LAP and PLISSIT scores. Power calculations for correlated data, using simulations to avoid an underlying assumption of normality, showed there was 90% power with an alpha level of 0.05 to detect a mean difference in LAP scores between doctors of 9, assuming a standard deviation of 7 and ICC of 0.75. Similarly, for the more variable PLISSIT scores, there was 90% power to detect a mean difference as small as 12, assuming a standard deviation of 10 and ICC of 0.75.

To determine if the LAP scoring methodology was comparable to PLISSIT scores a Bland–Altman plot of the standard deviation against the mean was generated; that is, LAP and PLISSIT scores were plotted against mean scores (LAP + PLISSIT)/2. Pitman tests of difference in variance were performed. Similar comparisons were made with the four domains of the PLISSIT scores.

Results

Thirty-four consultations were successfully recorded. The mean duration of the consultations was 12 minutes and 10 seconds. One doctor's recordings failed in two cases. The overall mean LAP score was 59.8 (SD 6.1). There was no evidence that the GPs in this study scored significantly differently from six other GPs in a similar actor-patient consultation study in which the mean score was 62.6 (SD 13.6, p=0.5716).Agreement by assessors on GP LAP scores was generally good. The assessors were from similar practice backgrounds (the UK and Australia) and had similar experience in conducting assessment, but different seniority as practitioners (5 vs 15 years). Close attention was paid to calibration of the assessors, with each assessor scoring the consultations independently and then comparing scores to focus on areas of disagreement in order to arrive at a consensus score. The mean PLISSIT score was 64.3 (SD 13.8). There were significant differences in both LAP and PLISSIT scores between the doctors (Table 2). Although the highest and lowest LAP and PLISSIT scores were obtained by the same doctors, there was variation in relative scores amongst the remaining doctors.

Strong within-doctor (using intraclass correlation coefficients) correlations for LAP scores (0.79) and for PLLISSIT scores (0.76) were observed. In order to determine whether the mean scores varied for each of the actor scenarios, generalised estimating equations were used to fit a linear model that took this within-doctor correlation into account (Table 3). Individual actor-patient scenarios were observed to be predictors of mean LAP scores but not mean PLISSIT scores in

Table 2 Mean LAP and PLISSIT scores for each participant over six consultations

Doctor	LAP Score				PLISSIT			
	Mean	SD	β	p-value	Mean	SD	β	p-value
1	58.0	3.1	–	–	0 74.6	8.0	–	–
2	67.8	4.8	9.9	<0.001	0.77.4	5.0	2.8	0.513
3	61.8	1.7	3.8	0.041	0 74.3	5.3	–0.3	0.949
4	50.2	3.7	–7.7	<0.001	0 47.2	10.9	–27.4	<0.001
5	59.1	0.8	1.2	0.538	0 51.0	8.0	–23.5	<0.001
6	60.2	0.3	2.2	0.224	0.60.6	3.0	–14.0	0.003

The mean difference in scores (β coefficient) relative to participant number 1 and associated p-value are also shown as estimated from each of the two standard unadjusted linear regression models

Table 3 Mean and standard deviation of LAP and PLISSIT scores by actor–scenario

Scenario	LAP Score				PLISSIT			
	Mean	SD	β	p-value	Mean	SD	β	p-value
1	57.6	5.9	–	–	66.0	13.2	–	–
2	61.0	7.1	3.4	0.076	68.3	10.9	–0.7	0.965
3	61.0	6.1	3.4	0.001	66.5	6.7	0.5	0.870
4	59.4	8.0	1.8	0.150	65.1	19.7	–0.9	0.816
5	57.8	4.5	–0.2	0.903	61.9	16.1	–2.2	0.587
6	60.7	6.0	3.1	0.004	58.2	16.4	–7.8	0.075

The mean differences in score after adjusting the variance for clustering by doctor are represented by the β coefficients with the associated p-value from two linear models

this small sample, although the study was only sufficiently powered to detect large differences in scores.

A Bland–Altman plot of the difference between LAP and PLISSIT scores plotted against the mean scores shows that there was poor agreement between LAP and PLISSIT scores in this small study (Figure 1). The limits of agreement (mean ±2SD) are wide and range from -27.4 to 17.9, reflecting the small sample size and the large variation in differences between the two scales. There is also evidence of an asymmetric bias (Pitman test *P*=0.002) and as indicated by the slope of the regression line of the difference between scores and mean scores. At lower mean scores the LAP scores are higher than the PLISSIT scores, whereas this reverses as the mean score increases, with PLISSIT scores higher than LAP scores.

It was observed that total LAP scores showed better agreement with two domains of the PLISSIT scores compared to the overall PLISSIT scores. The mean difference in LAP score and the 'Permission' domain of PLISSIT was 33.9, with narrower limits of agreement of 24.3 to 43.4 and a Pitman test of difference in variance *p*-value of 0.372. For the 'Limited Information' domain, the mean difference in scores was 36.8 with limits of agreement ranging from 26.7 to 46.8 and a Pitman test of difference in variance *p*-value of 0.301.

Discussion

There were significant differences in LAP scores and PLISSIT scores when we analysed the data by doctor and by scenario, suggesting that the participating doctors had different levels of performance and that the two different measures deployed assessed different things. We noted that doctor 1 ranked highly on PLISSIT but did not perform as well on LAP. If such variability is confirmed in a larger study then one might conclude that generic measures of GP consultation performance are not necessarily appropriate in some circumstances as they may not detect significant deviations from the mean. In our data the LAP assessment appeared to have some association with the type of actor–scenario, whereas the PLISSIT scores were more homogenous, although this study was only sufficiently powered to detect large differences between the scores. There was evidence that the 'Permission' and 'Limited Information' domains of PLISSIT showed better agreement with LAP scores than did other domains. This is entirely consistent with the fact that the LAP domains assessed in this study included history taking skills.

The approach we took to exploring the issue of management of psychosexual problems has several strengths; we were able to replicate conditions that might be difficult to control or observe in clinical practice and the practitioners all saw the same patients in the same sequence.[16] In many ways the methodology involving actor-patient consultations mimics the formal assessment or examination of candidates seeking membership to many professional colleges and has been previously demonstrated.[21] As in previous studies, the participating GPs were volunteers and perhaps unrepresentative. That alone was not considered a major limitation in the design of this study, which was intended to compare competencies measured on two different measures. There was no evidence that the GPs in this study performed better or worse than practitioners in a similar recorded, standardised patient study but we have no measures of how these practitioners perform in routine practice outside the study using these or other measures of competence.[16] We are therefore unable to confirm how well their performance here reflects their competencies
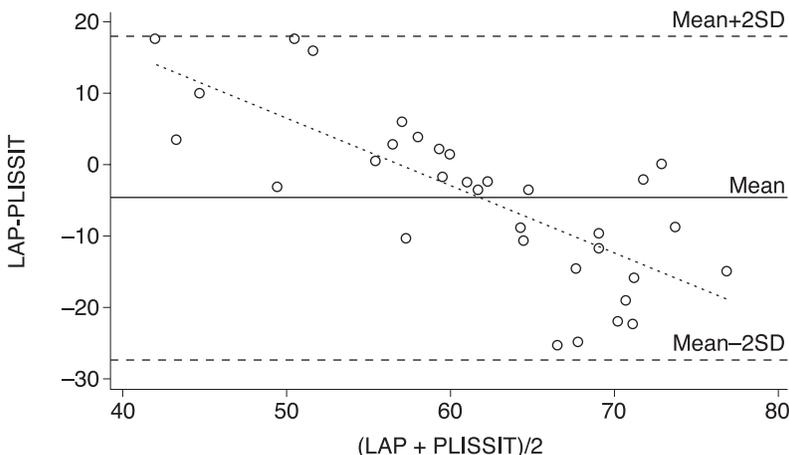
The mean difference (solid line), limits of agreement (dashed lines) and regression line of difference on mean (dotted lines) are shown

Figure 1 Bland–Altman plot of the difference between LAP and PLISSIT scores plotted against mean scores

when 'real' patients consult them. We also acknowledge that the PLISSIT assessors were mostly experts in psychosexual care, although one assessor was also a GP. Assessment by a predominantly specialist team may have introduced some bias into the analysis of the consultations. However, it should also be noted that the PLISSIT scoring schedule was weighted to take account of the fact that GPs do not generally provide psychosexual therapy in the course of a routine consultation.

The GPs were also aware that the 'patient' presenting to the clinic was an actor and that a formal examination would not be required. While incognito presentations are sometimes recommended for standardised patient studies, primarily because they reduce the perceived loss of 'reality' for the GPs, such presentations when focusing on psychosexual problems were deemed unethical.[22] We were unable to assess the impact of observation on the GPs' performance although the literature on video recording for the purposes of assessment suggests that it has no significant adverse effect.[23] Finally, as investigators in the study, the assessors could not be blinded to the aims of the study. We do not believe this had an impact on the scores; however, it would be prudent to deploy assessors who could successfully be blinded at the time of reviewing the consultations.

Psychosexual problems are a common presentation in general practice. Consulting patients with psychosexual problems requires excellent consultations skills. Our data suggest that it cannot be assumed that GPs will display the same level of skills on different measures. When the subject of variable performance relates to the management of a physical symptom such as rectal bleeding or chest infection then experts other than GPs may have a role in the education or assessment of GP competence.[24,25] We propose that appropriate management of psychosexual problems requires similar multidisciplinary input. We also believe it is important and interesting that measures of competence in psychosexual care demonstrate variety in the skill set. These data are a prelude to interventions that may be helpful. The PLISSIT framework has demonstrated variable performance, and like the LAP offers a framework for elements of the consultation that may be the focus of training.

Conclusions

We report evidence that the GPs in this study were deemed to have varying skills when assessed using two different measures. It is unsafe to assume that GPs who display satisfactory consultation skills by one generic

measure would be rated equally well when assessed using another specialised schedule.

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