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Original Research Article

Comparison of the quality of care in psychiatric intensive care units and acute psychiatric wards

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Abstract

Background: Literature comparing the quality of care on psychiatric intensive care units and acute wards is sparse, but a review has found differences in key areas e.g. violence, drugs and alcohol.

Method: This study compares the response to questionnaires completed by patients, carers and qualified nursing staff from PICUs and acute wards as part of the Accreditation for Inpatient Mental Health Services (AIMS) process.

Results: There were few differences between the standards of care on PICUs and acute wards according to patients, carers and qualified nurses. Patients reported a more negative experience of care on PICUs than trained nurses, and in particular rated low standards on accessing records and counselling. Carers reported inadequate involvement in risk assessment an assessment of their needs. Nurses generally gave positive views of standards of care.

Implications: The challenging environment of the PICU does not appear to be compromising quality of care. There is however still room for improvement for both acute wards and PICUs in key areas, including full involvement of patients and carers and imparting information.

Keywords

Psychiatric intensive care units; accreditation; quality improvement; patient experience

INTRODUCTION

The defining features of psychiatric intensive care units (PICUs) appear to differ depending on the specific local development of services (Crowhurst & Bowers, 2002). Although there are some inconsistencies in the definition of a PICU, their key differences compared to acute inpatient wards are that PICUs provide higher levels of staff input, more facilities and higher levels of security (Beer et al. 2001). People admitted to PICUs are younger, more likely to be male, have a history of substance misuse or violence, be experiencing a period of acute psychotic illness and to be detained under the Mental Health Act than those admitted to acute wards (Brown & Bass, 2004). Finally, patients are more likely to receive antipsychotic medication, rapid tranquilisation, and seclusion (Brown & Bass, 2004).

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There is a small literature developing, which focuses on comparing the characteristics of PICUs and acute wards. Studies have found perceptual differences between staff in both environments. PICUs can be a challenging environment for staff to work in, with aggressive incidents towards both staff and patients being commonplace (Cohen et al. 2008). Higher numbers of PICU nurses report being the victims of violence than their colleagues on acute wards (Royal College of Psychiatrists, 2007; Loubser et al. 2009). Nurses working on acute wards are more likely to attribute problems, including violence, to drug and alcohol use than their PICU colleagues (Loubser et al. 2009). Bowers et al. (2003) studied the differences in the perspectives of acute and PICU nursing staff in relation to appropriate admissions for a PICU. They found that acute nursing staff took into account a smaller range of risk factors when considering admission and had a lower threshold for suitability when compared to PICU staff.

Patients have also reported higher rates of being assaulted on PICUs than acute wards (Loubser et al. 2009). Furthermore, they reported that that aggressive behaviour on the ward is too quickly countered with medication, physical restraint or seclusion (Royal College of Psychiatrists, 2007).

Perhaps unsurprisingly, differences of opinion have been found between staff and patients about how violent behaviour towards staff and patients is managed on mental health wards. The National Audit of Violence (Royal College of Psychiatrists, 2007) found that staff were more likely than patients to feel that violence between patients was effectively managed, whereas patients were more likely than staff to feel that violence towards staff was managed effectively. Patients were significantly less likely than nurses to report problems with drugs and alcohol and link them with violence on a range of adult inpatient units (Chaplin et al. 2006; Loubser et al. 2009). Interestingly, nursing staff from both acute wards and PICUs reported more negatively than patients on the ward environment, for example, adequate space and temperature (Chaplin et al. 2006).

It is of crucial importance that high quality care is delivered despite the challenging environment of the PICU. The Accreditation of Inpatient Mental Health Services (AIMS) quality improvement project was set up to raise standards of care in acute inpatient wards (Lelliott et al. 2006). AIMS is part of a wider quality improvement initiative coming from the Royal College of Psychiatrists' College Centre for Quality Improvement (CCQI). The project was extended in 2009, alongside input from NAPICU (National Association of Psychiatric and Intensive Care and Low Secure Units), to monitor and improve care on PICUs (see Lemmey et al. 2011).

This study aims to compare the quality of care on PICUs and acute wards by analysing questionnaires from the AIMS project measuring the experiences of patients, carers and qualified nursing staff. It is hypothesised that there would be more negative experiences from patients, carers and qualified nursing staff on PICUs compared with acute wards. The secondary aim of this study is to look specifically at quality issues on PICUs, including comparing the responses of patients and qualified nursing staff about their experiences in these environments.

METHOD

The AIMS project measures the quality of inpatient care against standards which have been developed by a steering group employing review of literature research, guidance and recommendations (Cresswell et al. 2010). There was then a process of consultation with stakeholders (Lelliott et al. 2006; Cresswell & Lelliott, 2009). Initially the project recruited acute wards (referred to as AIMS-WA, AIMS for wards serving adults of working age) but this was extended to PICUs as the standards were adapted and modified. They are revised annually or as new guidance dictates; the AIMS-PICU are currently in their second edition.

Accreditation is achieved through an assessment of patient, carer and staff views as well as the ward environment, record keeping and trust policies. The ward undertakes a self-review, then

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a peer-review is conducted by a team which includes service users and carers. The Accreditation Committee reviews the data and their decision is ratified by the Special Committee for Professional Practice and Ethics. A detailed explanation of the AIMS process is available online (Royal College of Psychiatrists, 2011).

Criteria for inclusion

All 22 acute wards and 22 PICUs with an AIMS peer-review between March 2010 and the end of June 2011 were included in this study. Anonymous questionnaires for patients and carers were sent to ward managers. They were instructed to distribute them and return them in freepost envelopes. Patients could request assistance from advocates but staff were instructed not to be involved. Staff questionnaires were completed online using login details that were separate to those for the ward manager. The response rate could therefore not be determined as the AIMS team did not have a record of the numbers distributed. Questionnaires had Yes/No responses, with the occasional N/A (full copies of the individual questionnaires can be obtained from the authors).

Analysis

The results were analysed using a chi-squared without Yates' correction. For cases where N was lower than ten, Fisher's exact test was used. Due to the large number of items on the questionnaires that were subject to significance tests, a Bonferroni correction was used with the significance level set at $p < 0.01$.

During the period of data collection there were minor modifications to some of the items on the questionnaires for both types of unit. Analysis was therefore only conducted on those questions that remained the same. Additionally, standards were only included if they were the same for both AIMS-PICU and AIMS-WA. Analysis of the Staff Questionnaire was limited to items corresponding with the patient questionnaire plus those relating to key issues highlighted in AIMS reports (Cresswell & Lelliott, 2009; Lemmey et al. 2011).

RESULTS

Within the time period specified, the following were received: 392 acute and 225 PICU patient questionnaires; 101 acute and 73 PICU carer questionnaires; and 213 acute and 238 PICU qualified nursing staff questionnaires. Tables 1–3 present the number of questions answered yes as percentages of the total number of answers to each question, not of the total number of questionnaires completed; respondents did not have to answer all questions.

Patient questionnaires

The results of the standards measured by patient questionnaires are presented in Table 1. There were no significant differences in the compliance with any of the standards except regarding being able to leave the unit to attend other activities elsewhere, which was lower on PICUs. The other standards which included orientation, access to information and involvement in care planning, therapy and activities, medication management, personal space, and complaints showed no significant differences in compliance between acute wards and PICUs as measured by patient questionnaires.

Standards which were rated by more than 70% of patients on PICUs included orientation to the unit, being able to ask staff to explain when they didn't understand, and being able to use a telephone in private and being offered one to one time with staff. They also included being able to talk to staff about their medication and feeling that their dignity was taken into account when being given their medication.

Standards which were rated by less than 50% of patients on PICUs included being told how to access their records, receiving a welcome pack and being offered supportive counselling. The majority of standards (14/25) received ratings of compliance from 50–70% of patients on PICUs.

Carer questionnaires

There were no significant differences in ratings between the standards of care on acute wards

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Table 1. Quality standards measured by patient questionnaire with responses from acute wards and PICUs

	Acute		PICU	
Standards	**Yes**	**%**	**Yes**	**%**
Were you introduced to a member of staff who would be your point of contact for the first few hours?	289	76	158	73
Were you shown around the unit by a member of staff?	295	78	159	73
Did you receive a welcome pack or introductory booklet?	198	52	99	46
Were you given written information on your legal status and your rights?	206	57	136	64
Were you able to involve all the people you rely on for support in your assessments?	255	69	148	71
Have you been told how to access your current records if you want to?	116	31	79	37
Have you been offered a copy of your care plan (and given the opportunity to sign this), or are you able to request to see your care plan when you want to?	228	61	124	59
Are you offered one-to-one time by a member of staff at least once per shift?	247	66	159	74
Do the staff generally give you feedback on actions or decisions made regarding your care after unit reviews (ward rounds)?	269	73	148	69
Can you meet your clinician outside of MDT meetings?	230	64	118	58
Has it been explained to you what the advocacy service is and what it can do for you?	218	58	137	66
When the staff are talking to you, do they ever use medical terms which you cannot understand?	101	27	73	35
If you cannot understand what staff are talking about, do you feel able to ask them to explain?	335	90	185	88
Have you received any information about the level of observation you are under?	212	56	122	59
Are you able to discuss your medication with the staff?	327	88	191	91
Have staff explained any limitations of the medication?	209	57	118	56
Have staff explained any side-effects of the medication?	205	56	130	62
Do the unit staff assist you to manage your medication yourself as far as possible?	219	61	127	63
Do you have access to a pharmacist to discuss your medication if you request it?	189	54	118	61
When the staff are giving you your medication, do you feel that your privacy, dignity and confidentiality are taken into account?	297	81	163	81
Are you able to use a telephone in private?	311	84	164	78
Have you been involved in planning your therapy programme?	234	63	126	62
Have you been offered supportive counselling for at least one hour per week?	163	44	76	38
Are you able to leave the unit to attend other activities?	*269**	75	98	56
Have the staff informed you how to make a complaint?	217	58	123	63

*$p < 0.01$

and PICUs as measured by the carer questionnaires (Table 2). These standards included meeting with ward staff, provision of information, care planning, risk management and an assessment of their own needs.

Standards which were rated by more than 70% of carers on PICUs included feeling able to express their views in meetings, being offered information about the unit and information about advocacy. Standards which were rated by less than 50% of carers on PICUs included being informed how to get an assessment of their own needs or involved in devising risk management plans.

Qualified nursing staff questionnaires

Standards of patient care and staff training and supervision were measured by the qualified nursing staff questionnaire (Table 3). There were no significant differences in the compliance with standards between acute wards and PICUs except on the standard: 'Patients being given the opportunity to have supportive one-to-one sessions with staff every day'. This was significantly more likely to occur on a PICU (Fishers exact test, $p < 0.0001$).

The only question for which qualified nursing staff PICUs answered 'Yes' less than 70% of the time concerned rehearsal of alarms.

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Table 2. *Quality standards measured by carer questionnaires from acute wards and PICUs*

	Acute		PICU	
Standards	**Yes**	**%**	**Yes**	**%**
Were you offered an interview with a member of staff, within three days of your friend or relative's admission, to discuss your views about ongoing and future involvement in their care?	57	59	44	61
During this interview, were you offered an explanation and information sheet about unit procedures etc.?	41	77	35	85
During this interview, were you offered information on advocacy services for carers, welfare rights and mental health services?	36	69	29	71
Have you been told how to get an assessment of your own needs?	41	43	32	47
Have you been able to express your views at meetings to discuss your friend or relative's care (e.g. multi-disciplinary reviews)?	67	73	51	77
Have you been involved in the devising or updating of your friend or relative's risk management plan?	39	42	30	45
Have your views been taken into account when the staff were devising your friend or relative's risk management plan?	50	69	43	62
Have you been involved in all aspects of your friend or relative's (transfer/)discharge?	45	79	30	67

Table 3. *Quality standards measured by qualified nursing staff questionnaire responses from acute wards and PICUs*

	Acute		PICU	
Questions	**Yes**	**%**	**Yes**	**%**
Patient care standards				
Is each patient informed of the process of how and when they may access their current records if they wish to do so?	154	74	176	75
Is each patient invited to meet with a member of staff for one-to-one contact each waking shift and is this documented?	187	89	196	83
Does each patient have the opportunity to have supportive one-to-one sessions with staff every day?	*184**	*87*	*229*	*97*
Is each patient offered supportive counselling for a minimum of one hour per week?	135	64	165	71
Are patients involved in negotiating their own therapy/activity programme, and is this recorded in their care plan?	192	91	201	85
Are patients able to leave the ward to attend activities elsewhere in the building and, with appropriate supports and escorts, to access usable outdoor space every day?	196	93	212	90
Staff safety and training standards				
Are you able to take allocated breaks?	144	68	165	71
Are you aware of your role and the roles of others when the alarm system is activated?	212	100	237	100
Do you rehearse this on a regular basis?	130	61	136	58
Do you have a means of communicating with the ward when you are escorting patients off the ward?	179	85	206	87
Do you feel that the appropriate risks are taken into account before escorting patients off the ward?	204	96	234	98
Do you feel safe when escorting patients off the ward?	206	97	232	98
Are you able to access emergency ad hoc supervision if required?	196	92	225	95

*$p < 0.0001$

Comparison of patient and qualified nursing staff experience on PICUs

Responses from patients and qualified nursing staff on PICUs were compared (Table 4). This was only done on the questions that were measuring the same standard, i.e. patients' access to records; one-to-one contact; supportive counselling; involvement in the therapy/activity programme and whether patients were able to leave the ward. Apart from one-to-one time, the opinions of patients and staff as measured by

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Table 4. A comparison of responses between patients and qualified nursing staff on PICUs

	Patients		Staff	
Standard	**Yes**	**%**	**Yes**	**%**
The patient is informed of the process of how and when they may access their current records, if they wish to do so.	79*	37	176	75
Each patient is invited to meet with a member of staff for one-to-one contact each waking shift and this is documented. Time is set aside purposely for this.	159	74	196	83
Each patient is offered structured psychological intervention for one hour per week, e.g. motivational interviewing, solution-focused therapy, appropriate to identified need.	76*	38	165	71
Each patient has the opportunity to be involved in negotiating an activity and therapy programme that includes evening and weekend activity.	126*	62	201	85
Patients are able to leave the unit to attend activities elsewhere in the building and access usable outdoor space every day.	98*	56	212	90

*$p < 0.001$

their questionnaires significantly differed for all of the standards ($p < 0.001$) with nurses rating them more positively.

DISCUSSION

Main Findings

Overall, PICUs appear to be meeting standards relating to ward orientation, privacy and dignity and patients being able to talk to staff. Carers are able to express their views and are offered information about the unit. Findings for qualified nursing staff were particularly positive, with all but one standard answered positively by over 70% of respondents. However, areas for improvement are also highlighted. For patients, this concerns having access to information and involvement in care planning, therapy and activities, medication management and complaints. Carers rarely receive an assessment of their needs or are involved in risk management plans. Finally, PICUs are not rehearsing responses to alarm calls regularly.

Overall, there appear to be no significant differences in the key standards relating to quality of care that have been measured between PICU and acute wards. For staff, the only significant difference regarded more opportunity for one-to-one time with patients on a PICU. This might be expected as PICU provide higher levels of staff input (Beer et al. 2001).

Qualified nurses gave a more favourable opinion than did patients of all but one of the standards that they both rated. Reasons for this are unclear and warrant further exploration, but highlight the importance of obtaining a diverse representation of people who experience life on a PICU. One possibility is that the nurses are referring to their standard practice with patients as a whole and patients to their individual experiences.

Strengths and limitations

This study has a number of strengths. It has used a robust process which has developed questionnaires based on evidence-based standards and has included a large number of wards over England and Wales, giving representation from multiple centres and Trusts. Opinions from patients, carers and staff have been sought to give a holistic picture. However, the trusts and wards who took part volunteered to do so and may therefore not be representative of acute and PICU wards nationwide. There may also be a response bias in the completion of questionnaires by staff, service users and carers and the response rate could not be calculated.

Implications and conclusion

Previous literature comparing PICUs and acute wards is sparse, but has found differences in key areas (e.g. violence, drugs and alcohol, Loubser et al. 2009; staff opinions on admissions, Bowers et al. 2003). Despite this, and the fact that PICUs are a more challenging environment, this does not appear to have compromised the quality of care that PICUs provide according

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to the methodology adopted. In summary, our data represent relatively high ratings of standards of care by nursing staff, but less so by patients and carers, that are similar for PICUs and acute wards. The experience of severe and acute mental illness in the PICU sample does not appear to jeopardise the quality of care received. Further work should focus on improving patient and carer experiences on PICUs and link their specific quality standards to clinical outcome.

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