### ATTACHMENT JK 1

This is the attachment marked "**JK 1**" referred to in the witness statement of Jayashri Kulkarni dated 20<sup>th</sup> July 2015.

### **Psychiatric services**

### AUSTRALASIAN PSYCHIATRY

## Establishing female-only areas in psychiatry wards to improve safety and quality of care for women

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### Abstract

**Objective:** Our aim was to assess the impact of creating a female-only area within a mixed-gender inpatient psychiatry service, on female patient safety and experience of care.

**Method:** The Alfred hospital reconfigured one of its two psychiatry wards to include a female-only area. Documented incidents compromising the safety of women on each ward in the 6 months following the refurbishment were compared. Further, a questionnaire assessing perceived safety and experience of care was administered to female inpatients on both wards, and staff feedback was also obtained.

**Results:** The occurrence of documented incidents compromising females' safety was found to be significantly lower on the ward containing a female-only area. Women staying on this ward rated their perceived safety and experience of care significantly more positively than women staying where no such gender segregation was available. Further, the female-only area was identified by the majority of surveyed staff to provide a safer environment for female patients. **Conclusions:** Establishing female-only areas in psychiatry wards is an effective way to improve the safety and experience of care for female patients.

Keywords: female-only, gender safety, gender-segregated model, mixed-gender, ward safety

Corresponding author: Jayashri Kulkarni, Monash Alfred Psychiatry Research Centre The Alfred and Monash University Central Clinical School, Level 4, 607 St Kilda Rd, Melbourne, VIC 3004, Australia. Email: jayashri.kulkarni@monash.edu Since the 1960s, psychiatric inpatient units in many parts of the world have housed male and female patients together.<sup>1</sup> This was intended to promote a 'normal' environment that reflected societal living. However, with the advancement of community-based mental health care provision, hospitalisation is now usually reserved for more severely unwell patients.<sup>2</sup> Higher acuity coupled with the mixed-gender environment has increased reports of patients feeling vulnerable to intimidation and assaults.<sup>3</sup> In the UK, an audit of violence occurring between 2003 and 2005 found that 37% of 1386 psychiatric inpatients had been 'attacked, threatened or made to feel unsafe'.<sup>4</sup> Research from the USA found that 8% of participants reported sexual assault while in psychiatric settings.<sup>5</sup>

In Australia, a 2006 study found that 59% of 75 female inpatients reported feeling unsafe in mixed wards, and 61% reported experiencing harassment, intimidation or abuse. Specific frightening experiences included males entering their bedrooms (13%), sexual harassment (11%), and sexual assault (5%).<sup>6</sup> Clinicians working in inpatient units have noted patient trauma from the admission itself.<sup>7</sup>

## Creating female-only areas in a mixed-gender ward

A key recommendation of the 2008 NSW Garling Review was that mixed-gender wards should be phased out.8 In Victoria, \$320,000 funding was obtained by The Alfred, a tertiary hospital in Melbourne, to create a female-only area within a mixed-gender ward. Refurbishment occurred on one of the hospital's two wards (the 28-bed 'ground-floor' ward) following consultation with staff and consumer/carer representatives. Six beds, as well as toilets, a lounge and a courtyard were created within the ground-floor ward. Even if not allocated to a bed within this female-only space, all women staying on the mixedgender ground-floor ward had access to the toilets, lounge and courtyard. The second psychiatry ward (the 26-bed 'first-floor' ward) continued to offer mixed-gender care. By comparing two wards from the same service that share inherent similarities (i.e. staffing, male/female patient ratios, and décor) we were able to more accurately assess the impact of the female-only area on female patients' objective and perceived safety, and experience of care. It was hypothesised that a femaleonly area within a mixed-gender ward would improve women's safety, perceived safety and overall experience of care, compared with a standard mixed-gender ward.

### Methods

### Participants

*Patients.* Of 100 patients approached, 65 female inpatients (21 first-floor patients, 44 ground-floor patients), were involved in this study. Declining participation occurred primarily due to being very unwell, or being angry about being on the ward. There were fewer patients

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recruited from the first-floor ward due to our later decision to include these patients as a control group, to compare with ground-floor patients who were analysed as one group - ground-floor patients comprised women for whom a bed was available in the female-only area of ground floor at admission, and also women for whom a bed was available in the mixed-gender section of ground floor. These patients were reasoned to be similarly exposed to the effects of the refurbishment, due to their access to the female-only area (i.e. toilets, lounge and courtyard) during their stay. While standard gender-sensitivity guidelines regarding clinical care were followed on both wards, female patients from the first-floor ward were considered an important comparative group due to the absence of specific gender segregation on this ward. Despite being acutely unwell at the time, all women who participated were able to provide informed consent.

*Staff.* In total, 20 hospital staff (65% nurses, 30% allied health, and 5% medical staff) working within the psychiatric service, from 42 staff approached, were involved in this study. Declining participation was chiefly due to lack of time.

#### Measures

*Safety data.* The Victoria Health, Alfred hospital-wide RiskMan system<sup>9</sup> captured all documented incidents occurring on both wards during the 6-month post-refurbishment study period. Any documented incident experienced by a female inpatient: sexual or non-sexual aggression, assault, harassment, intimidation, and vulnerability, was defined as an incident that compromised female patient safety.

*Patient questionnaire.* The patient questionnaire (see Table 1) was in part adapted from the *Search for Acute Solutions* in acute psychiatric wards survey.<sup>10</sup> Additional items were selected based on discussion with the clinical and academic research team, which were then piloted with a small number of patients to assess face validity and comprehension. Items were rated using 5-point ("strongly disagree" to "strongly agree") or 4-point ("not at all" to "very") Likert scales.

*Staff questionnaire.* The staff questionnaire was developed to assess perceived impact of the introduction of the female-only area on patient safety and ward atmosphere.

### Procedure

The Alfred Hospital Human Research Ethics Committee approved this study. A mixed-method design was used to (i) quantify the incidents comprising female patients' Kulkarni et al.

	Ground-floor patients (female-only area access) (n = 44)	First-floor patients (n = 21)	p-value
Physical environment			
The ward is comfortable.	2.6 (1.2)	2.4 (1.2)	.547
There is a quiet room I can go to if I want which feels appropriate for my needs.	2.9 (1.0)	2.0 (1.3)	.006**
I find the ward environment therapeutic (helpful for my mental health).	2.6 (1.0)	1.9 (1.0)	.013**
I have somewhere where I can lock my personal things away. <sup>a</sup>	2.9 (1.0)	2.7 (1.0)	.382
	2.9 (1.2)	2.3 (1.1)	.050*
This ward feels like a safe place to be a patient in.	2.8 (1.1)	2.1 (1.0)	.035*
•	2.7 (1.0)	2.1 (1.1)	.005**
My privacy is respected on this ward. <sup>a</sup>	2.5 (1.2)	1.9 (1.1)	.053*
I can get a restful night's sleep on this ward.ª	2.7 (1.1)	2.2 (1.1)	.072
There is a problem with aggression on this ward.	1.7 (1.1)	2.1 (1.2)	.219
During this admission, I have witnessed violence to other patients. <sup>a</sup>	1.4 (1.3)	1.3 (1.1)	.736
During this admission, I have experienced violence towards myself on this ward.	0.9 (1.1)	1.3 (1.1)	.167
During this admission, I have experienced intimidation on this ward.	1.3 (1.3)	1.8 (1.3)	.148
During this admission, I have experienced sexual harassment on this ward.	0.8 (1.2)	1.3 (1.1)	.143
Staff I feel comfortable approaching staff members when I need to. <sup>a</sup>	2.9 (1.2)	2.6 (0.9)	.285
Staff are able to assist with my personal hygiene needs on the ward. <sup>a</sup>	3.1 (1.0)	2.2 (1.2)	.002**
Most of the staff members treat me with respect. <sup>a</sup>	3.1 (1.0)	2.9 (1.0)	.543
	3.4 (.70)	2.9 (0.8)	.007**
Overall, how satisfied were you with your stay at this ward? <sup>ab</sup>	2.2 (.80)	1.5 (1.0)	.003**
Overall, how safe did you feel throughout your	2.1 (1.0)	1.6 (0.9)	.040*

	Ground-floor patients (Female-only area access) (n = 44)	First-floor patients (n = 21)
Age: mean (SD) years	42.36 (11.9)	42.6 (10.5)
Admission length of stay: mean (SD) days	16.87 (17.4)	19.5 (28.0)
Self-reported diagnoses: n(%)		
Psychotic illness	28 (72)	11 (58)
Mood disorder	9 (23)	5 (26)
Post-partum psychosis/depression	2 (5)	0 (0)
Anxiety disorder	2 (5)	5 (26)
Eating disorder	0 (0)	1 (5)
Personality disorder	3 (8)	1 (5)



# Figure 1. During the 6-month study period, the number of incidents occurring on the two wards that compromised female patients' safety.

safety on both wards, documented during the 6 months post-refurbishment; (ii) administer the questionnaire on perceived safety and experience of care to female patients; and (iii) gather feedback from hospital staff, via the staff questionnaire and qualitative interviewing. An intermittent sampling approach was adopted, where research staff attended the wards weekly during the 6 months following the introduction of the female-only area within the ground-floor ward.

### Results

Data was analysed using IBM SPSS 20.0.0. Independentsamples *t*-tests were used to examine patient group differences regarding safety, perceived safety and experience of care. Open-ended responses from patients and staff were analysed via thematic analysis.

Ground-floor and first-floor patients' demographic and clinical data are presented in Table 2. There were no significant differences between the groups in age [t(62)=0.08, p=.94] or days since admission when interviewed [t(57)=0.44, p=.67].

### Safety data 6 months post-refurbishment

Captured by RiskMan,<sup>9</sup> the number of incidents comprising female patients' personal safety during the 6 months post-refurbishment was found to be six times higher on the mixed-gender first-floor ward than the ground-floor ward containing the female-only area (see Figure 1).

### **Patient responses**

Table 1 shows mean ratings by patients of their perceived safety and experience of care.

Women on the ward containing the female-only area felt safer during their stay than women staying on the first-floor ward [t(62)=2.10, p=.040]. Patients with access to the female-only area were significantly more likely to agree with the items, 'there is somewhere on the ward where I can go to feel safe' [t(63)=2.00, p=.050], and 'the ward feels like a safe place in which to be a patient' [t(63)=2.16, p=.035].

More generally, women on the ward with the femaleonly area were significantly more satisfied with their stay than women on the first-floor ward [t(62)=3.01, p=.003]. Ground-floor female patients were significantly more satisfied with the availability of a quiet room [t(32.31)=2.96, p=.006], the ward environment being friendly/welcoming [t(63)=2.90, p=.005] and therapeutic [t(63)=2.60, p=.013], having privacy respected [t(62)=1.97, p=.053], getting assistance with personal hygiene needs [t(30.62)=3.05, p=.002], and having enough female staff to meet patient needs [t(63)=2.78, p=.007].

### Staff feedback

Staff ratings on the perceived impact of the refurbishment are presented in Table 3. Of note, 85% of staff 'agreed/strongly agreed' that the building works had improved the safety of the ward environment for Kulkarni et al.

	N responding	Mean (SD)	Proportion (%) agree/ strongly agree
Atmosphere on the ward post capital works			
This ward provides a safer environment for patients post capital works.	20	2.9 (1.1)	85%
This ward has a friendly and welcoming atmosphere.	20	2.7 (1.0)	65%
The privacy of patients is respected on this ward.	20	3.1 (0.8)	95%
Patients can get a restful night's sleep on this ward.	20	2.7 (1.0)	65%
There has been a reduction in patient to patient aggression post capital works.	20	2.6 (0.7)	45%
I have witnessed violence towards patients on this ward since completion of capital works.	19	1.6 (1.1)	32%
There are still issues with patient intimidation on this ward after completion of capital works.	20	2.7 (0.8)	70%
There is still a problem with sexual harassment of patients by patients on this ward post capital works.	20	2.4 (0.8)	55%
Gender-specific issues			
It is important to have a gender-sensitive ward environment.	18	3.6 (0.5)	100%
It is important to have a separate area for female patients.	18	3.3 (0.6)	94%
Separate seclusion area for male and female patients will improve the unit.	18	2.2 (0.9)	39%
There are enough female staff on this ward to meet the needs of female patients.	18	3.3 (0.8)	79%

women, 100% of responders agreed to the importance of having a gender-sensitive ward environment, and 94% agreed on the importance of having separate areas for female patients. The need for ongoing efforts to address intimidation and sexual harassment post-refurbishment was also highlighted by staff.

Clustered and coded responses for the thematic analysis of open-ended responses from staff also illustrate how benefits were achieved and what might be done to further improve care (Table 4).

### Discussion

Simple, effective solutions are required to improve the safety of women hospitalised for acute mental illness. We demonstrated here that compared with a mixedgender ward, a similar ward comprising a female-only area was associated with substantially fewer incidents compromising the safety of female inpatients, and resulted in a more positive perception of safety and experience of care. While the number of incidents overall was too small for a meaningful statistical analysis, the six-fold difference in the raw data was striking and suggestive of a significantly safer service model. Staff feedback also endorsed the introduction of a femaleonly area, and together these findings support previous international research into the benefits of gender-specific wards.  $^{11}$ 

Interestingly, the refurbishment was observed to inadvertently trigger some culture change regarding gender sensitivity, which may have influenced the findings of this study. Perhaps future research in this area might incorporate questionnaire items and/or follow-up assessment to quantify the flow-on effect of gender-sensitive changes on ward policy and culture.

The female-only area of the ground-floor ward provided a safe, optional space for female patients. Henderson and Reveley<sup>1</sup> argue that women should be able to have some choice over their care environment. Freedom to access the female-only area may have contributed to the overall more positive experience of the ward reported by ground-floor patients, compared with first-floor patients. Of course, acts that compromise personal safety can also occur *between* female patients, and supervision continues to be required.

This study had some limitations. The questionnaires that were administered to patients and staff are yet to be validated; nevertheless, clinicians and researchers experienced in women's safety issues developed and tested the items to ensure validity *prima facie*. Also, although able to provide evidence in favour of estab-

Question	Themes		
"In what way has your clinical practice changed since the implementation of specific gender- sensitive care?"	<ul> <li>Staff benefits (participants providing such a response)</li> <li>Increased awareness of gender issues and how to manage them (5)</li> <li>More choice for how to address individual safety concerns, e.g. can suggest female wing (3)</li> <li>Easier to monitor female patients (1)</li> <li>Clinical practice has improved (1)</li> <li>Theme: Patient benefits</li> <li>Female-only wing is very effective and preferred by some women (2)</li> <li>Fewer sexual harassment incidents have been reported to staff (1)</li> </ul>		
"What do you think staff can do to facilitate and	<ul> <li>More able to discuss vulnerability with patients (1)</li> <li>At times the ability to transfer from HDU to less restrictive environments is improved (1)</li> <li>Provide staff more gender-sensitive education to increase awareness</li> </ul>		
improve the provision of gender-sensitive care?"	<ul> <li>and ability to use guidelines in responding (4)</li> <li>Increase attention for male gender-sensitive patients / consider male only areas (3)</li> </ul>		
	<ul> <li>Staff must be aware of vulnerability or routinely ask if patients feel safe (2)</li> <li>Engage more with allied health clinicians to offer more general sensitive practices or resources, e.g. music, books (1)</li> </ul>		

lishing women-only areas on psychiatry wards, the small sample size limits the generalisability of these findings. Larger studies conducted across different inpatient settings (e.g. urban and rural services, complete and optional gender segregation) may yield different results and are required. These are areas for further service evaluation research, which we are planning to do.

### Conclusions

This study shows that establishing a female-only area within a mixed-gender adult psychiatry ward reduces the number of incidents compromising the safety of female patients, and improves perceptions of safety and, ultimately, the experience of care. This 'bricks and mortar' intervention, which can be tailored according to budget and site-specific requirements, may be further enhanced by the implementation of gender-sensitive safety guidelines and the provision of staff training. We urge policy makers and hospital administrators to provide separate areas for female inpatients on psychiatry wards, to improve the safety and quality of care for these often vulnerable women dealing with acute mental illness.

### Disclosure

The authors report no conflict of interest. The authors alone are responsible for the content and writing of the paper.

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