International Journal of Nursing Studies 88 (2018) 97–103

Contents lists available at ScienceDirect

International Journal of Nursing Studies

journal homepage: www.elsevier.com/locate/ijns

Measuring the violence prevention climate: Development and evaluation of the VPC-14

Nutmeg Hallett[a,b,*,1], Jörg Huber[c], Judith Sixsmith[b,2], Geoffrey L. Dickens[a,b,3]

[a] St Andrew's Healthcare, Cliftonville Road, Northampton, NN1 5DG, UK
[b] University of Northampton, Park Campus, Boughton Green Road, Northampton, NN2 7AL, UK
[c] University of Brighton, Falmer, BN1 9PH, UK

ARTICLE INFO

Keywords:
Rasch analysis
Scale development
Violence prevention climate
Ward atmosphere

ABSTRACT

Background: Violence and aggression are common in inpatient mental health hospital settings and cause problems for staff, patients and organisations. An important factor in treatment efficacy is ward atmosphere, and one element of this is the violence prevention climate.
Objectives: To develop and test the psychometric properties of a new scale to measure perceptions of the violence prevention climate among staff and patients in mental health inpatient settings.
Design: Scale development and cross-sectional validation study. Setting and participants: Three hospital sites within an independent sector provider of secure mental health care. Participants were patients and staff residing in/working on wards in the adult male and female mental health care pathways.
Methods: The study was conducted in three stages: scale development, pilot testing and psychometric evaluation. The scale items were developed from systematic literature review, informant interviews (staff) and focus groups (patients) and expert review. The resulting scale was subject to pilot testing with staff and patients (n = 58 and n = 25). The reliability and validity of the scale was examined by administering it to 326 staff and 95 patients. Exploratory factor analysis was used to establish construct validity, and this was further assessed with Rasch modelling. Internal consistency was assessed by calculation of Cronbach's alpha coefficients. Convergent and discriminant validity were measured by comparing results with existing validated instruments. Temporal stability of the items was assessed using test-retest reliability coefficients.
Results: The VPC-14 is a 14-item scale demonstrating good psychometric properties. Exploratory factor analysis revealed two subscales, staff actions and patient actions, each demonstrating good internal consistency (Cronbach's alpha .89 and .76). All items demonstrated good temporal stability. Rasch modelling confirmed the unidimensionality of the two subscales, and items demonstrated high construct validity. Moderate correlations were found between subscales of the VPC-14 and the EssenCES, whilst no correlations were found with items in the ACMQ, thus demonstrating good convergent and discriminant validity.
Conclusion: The VPC-14 is currently the most robust available measure of the inpatient violence prevention climate. It is quick and easy to administer, considers views of both staff and patients and thus can be introduced as standard practice in a ward setting. Potential uses include tracking the violence prevention climate longitudinally and in evaluation of new policy and procedural interventions.

What is already known about the topic?

- The violence prevention climate is a distinct element of the ward atmosphere in mental health inpatient settings.
- The violence prevention climate comprises the actions of staff and patients, as well as organisational and environmental factors, which combine to contribute towards violence prevention at primary and secondary levels.
- Existing scales assess the ward climate in general but no valid and reliable measure of the violence prevention climate specifically has

* Corresponding author at: School of Nursing, College of Medical and Dental Sciences, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK.
E-mail addresses: n.n.hallett@bham.ac.uk, @dr_nutmeg (N. Hallett).
[1] University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK.
[2] University of Dundee, Dundee, DD1 4HN, UK.
[3] Western Sydney University, Penrith, NSW 2751, Australia.

https://doi.org/10.1016/j.ijnurstu.2018.09.002

0020-7489/ © 2018 Elsevier Ltd. All rights reserved.

been identified.

What this paper adds

- A theory-driven and stakeholder informed new scale, the VPC-14, has been developed to measure staff and patient perceptions of the violence prevention climate.
- The VPC-14 has good psychometric properties based on both classical test theory and item response theory.
- The VPC-14 could be used to assess the perceived efficacy of violence prevention interventions, and if repeated regularly could provide a measure of the violence prevention climate over time.

1. Background

1.1. Introduction

Violence and aggression are common in inpatient mental health settings (Iozzino et al., 2015) and cause problems for staff, patients and organisations (Bowers et al., 2011). Surveys suggest that 30%–54% of health care staff have experienced violence in the past year (Campbell et al., 2011; Hatch-Maillette et al., 2007), and most staff working in mental health services expect to be assaulted at some time in their career (Bilgin and Buzlu, 2006). The practices that staff sometimes use to prevent violence by restricting patient autonomy (e.g. restraint, seclusion and forced medication) cause physical and psychological harm to staff and patients (Bonner et al., 2002; Fish and Hatton, 2017; Renwick et al., 2016) and can even result in patient death (Duxbury et al., 2011). In the UK, violence towards NHS staff is estimated to cost at least £69 million a year (National Institute for Health and Care Excellence, 2015a), and in mental health settings the estimated annual cost of verbal abuse and physical assaults is £20.5 million per year (Flood et al., 2008; National Institute for Health and Care Excellence, 2015b).The prevention of violence and aggression is therefore a vital part of the role of healthcare staff in these settings.

From a public health perspective, primary violence prevention refers to actions taken before violence has occurred, aimed at stopping its occurrence; secondary prevention comprises the actions taken to prevent imminent violence; while tertiary prevention encompasses the interventions that take place whilst violence is occurring and in its aftermath to minimise harm (Paterson et al., 2004). As such, primary prevention is encapsulated in activities and behaviours that are somewhat distal antecedents. There is a clear parallel, therefore, between primary violence prevention and the notion of the 'ward climate' that has been proposed as an important contextual determinant of outcomes.

The World Health Organisation (1953 p.17) stated that ‘the single most important factor in the efficacy of treatment given in a mental hospital appears … to be an intangible element which can only be described as its atmosphere’. Subsequently, the notion of social climate, the shared perceptions that people have about a particular environment (Bennett, 2010), to describe similar phenomena across social contexts including healthcare, education, and the wider workplace has become commonplace. In healthcare, the Ward Atmosphere Scale (WAS; Moos, 1974) has been the most widely used instrument but it lacks robust psychometric properties (Røssberg and Friis, 2003). As a result of the perceived shortcomings of the WAS,Schalast et al. (2008) developed the Essen Climate Evaluation Scale (EssenCES) to measure the ward atmosphere specifically in a forensic mental health setting.

1.2. Study rationale

The concept of a distinct ‘violence prevention climate’ is not entirely novel; Spector et al. (2007), who examined safety in a range of workplace settings including hospitals, describe it from an organisational perspective as employees' perceptions of the policies, procedures and training related to violence prevention rather than as an aspect of the social environment. Our review (Hallett et al., 2014) identified only one scale that measured perceptions of the violence prevention climate within mental health inpatient settings, the E13 (Björkdahl et al., 2013). However, the E13 has various shortcomings in the development and testing of the scale, specifically that there was no expert review of the items nor pilot testing prior to use, and no validity or reliability testing is described. The E13 was developed to evaluate a specific training model within one setting, and therefore may have limited generalizability away from that setting.

1.3. Study aims

The aim was to develop a reliable and valid scale to measure perceptions of the violence prevention climate among staff and patients in mental health inpatient settings, based on four key principles (Morello et al., 2013; Schalast et al., 2008; Streiner and Norman, 2008): i) it should be based on available evidence on the topic e.g., violence prevention in mental health settings; ii) scale items should refer to observable and relevant phenomena, for this scale that constitute primary and/or secondary violence prevention behaviours; iii) it should provide robust and valid quantitative data that can be used to make comparisons across wards and over time; and iv) it should be quick and easy to complete by both staff and patients.

2. Methods

2.1. Design

The study was conducted in three phases: i) scale development, ii) pilot testing, and iii) psychometric evaluation. The first phase included qualitative semi-structured interviews and focus groups, while subsequent phases utilised a cross-sectional survey design. The current study adhered to the methods of assessing reliability and validity described in the COSMIN checklist (Mokkink et al., 2010) which was designed for the evaluation of health-related patient-reported outcomes measures but are also relevant to outcomes measures more generally.

2.2. Participants and setting

Each phase of the study was conducted at one or more of three hospitals in England run by an independent sector not-for-profit provider of secure mental health care. Eligible participants were patients and staff residing in/working on wards in the adult male and female mental health care pathways (phases 1–3). The inclusion criteria for patient participants were age ($\geq$18 years), willing and able to give informed consent to participate in the study, currently admitted to inpatient mental health services, and English language speakers. Patients’ clinical teams advised on whether each individual had capacity to consent to the study, and this was monitored by the researcher during the consenting process and data collection. For the focus groups in phase 1, patients were recruited via the patient experience team. Staff members of the organisation’s prevention and management of violence and aggression team, as well as ward-based staff, were eligible for the interviews in phase 1; they were purposively sampled to capture the view of staff who were experienced in violence prevention. In phases 2 and 3 eligible staff were those permanently employed in the clinical setting, having worked on the ward for a minimum two week period, or those employed to work in the clinical setting on a non-regular basis and having a self-expressed knowledge of the ward setting.

2.3. Ethical considerations

Ethical approval for all aspects of the study including instrument development and piloting was obtained from Nottinghamshire NHS NRES Research Ethics Committee, (REC reference 13/EM/0221), and

Download English Version:

https://daneshyari.com/en/article/10134728

Download Persian Version:

https://daneshyari.com/article/10134728

Daneshyari.com