Prevention and Management of Behavior Health Issues in the Acute Care Setting
An Integrative Scoping Review of the Evidence

CLINICAL QUESTIONS:
1. "What are the best practices/strategies that can assist the RN with the care of adult hospitalized medical/surgical and critical care patients who have been diagnosed with or may have behavioral health issues?"
2. "What are the best practices/strategies that can assist the RN with the care of aggressive and/or violent adult hospitalized medical/surgical and critical care patients who have been diagnosed with or may have behavioral health issues?"

CONCLUSIONS: An integrative scoping review of the evidence was conducted to inform nurse leaders on the effective strategies and best practices for preventing and managing patient behavioral health issues. Two dimensions emerged from the evidence review and analysis of key findings. The first dimension was direct care management, which involves the nurse-patient relationship across the continuum of care3,5-7 (See Appendix A, Page 4). The second dimension describes the health system organizational structures, processes, and strategies that contribute to optimal care management and quality patient outcomes (See Appendix F, Page 11).1-7 Appendix E (Page 10) provides a visual illustration of the human and environmental interplay within a community and organizational infrastructure.1-7 Staff nurses, nurse educators, nurse managers, nurse executives, and other healthcare leaders can organize these strategies and models into the dual dimensions of health systems and care management in order to ensure that patients, family, and staff remain safe.

BEHAVIORAL HEALTH STRATEGIES: Successful behavioral health strategies involve an assessment of structures, processes, and nurse/patient relationships in order to achieve targeted patient, staff, and organizational outcomes1-7 (See Appendix F, Page 11: Structures, Processes, and Outcomes Table). Behavioral health prevention/management involves complex relationships between patient, clinician, and care environment.1-7 The interaction between people and environment in turn produces the final care experience1-7 (See Appendix E, Page 10: Behavioral Health Strategies). Patient-caregiver relationships, trust, and collaborative communication are foundational to behavioral health and positive patient care experiences, regardless of healthcare setting3,5,6,7 Staff awareness of the patient perspective is key: when staff members acknowledge and value the patients’ perspective, incidents of aggression and violence decrease.5,5-7

PATIENT AGGRESSION/VIOLENCE: Behavioral health issues, including patient aggression and violence, pose significant and serious risk for harm across acute care settings.1,2,3 Patient/visitor violence towards nurses is a global issue.3 Aggression is an important cause of emotional distress among caregivers and produces less than adequate outcomes for patients and visitors.3 Consequences of patient aggression include increased staff absenteeism,2 decreased productivity,2 litigation,2 security costs,2 treatment costs for staff injuries,3 property damage,2,3 workers compensation,2 anxiety,3 staff dissatisfaction,1 and recruitment and retention issues.2 Effective aggression management has moved beyond chemical and physical restraints.3,4 Management strategies now include awareness of situational1-7 and environmental factors,2,3 body language,4 and de-escalation/defusion techniques and therapeutic communication/relationships.2,3,5-6 These modern strategies can assist nurse leaders and other clinicians in assuring and maintaining safe care environments for patients, visitors, and the entire health team.2-4

DEFINITION: Patient Visitor Violence (PVV): Any verbal, non-verbal, or physical behavior that is threatening to staff/property or physical behavior that harms healthcare staff or damages property (Morrison, 1990).3

NOTE: The evidence did not reveal information concerning PVV in the maternal child setting; therefore, this scoping review will be limited to acute care medical/surgical and critical care environments.

KEY SUMMARY OF THE EVIDENCE
- Care management requires relationships across the care continuum and includes the following four dimensions:3,5-7 (See Appendix A, Page 4)
  - Primacy of Caring: Staff Awareness of Patient Perspective3,5-7
  - Nurse-Patient Communication3,5-7
  - Establishing Trust6
  - Patient Processing of Information6
- Evidence-based strategies, successful practices, and models exist to guide prevention and management of behavioral issues in acute care1-7 (See Appendix E Page 10; Appendix F, Page 11)
The Cognitive Model of Patient Aggression serves as a useful guide for the prevention and management of aggressive behavior in the acute care setting7 (See Appendix G, Page 12)

Strong organizational commitment and support is exemplified by ensuring official policies/procedures are in place against workplace violence, along with a non-punitive reporting structure with minimal barriers3

Interdisciplinary2,3 staff education/training on prevention/management of behavioral issues is needed on an annual and ongoing basis3,7 in order to maintain competency and to meet accreditation standards2,5 (See Appendix D, Page 7)

Service users (such as people using illicit drugs) can be valuable team members in the education process3,5

Unhealthy patient behaviors can be categorized as Physically Aggressive1, Physically Non-Aggressive,1,7 Verbally Aggressive1, and Verbally Non-Aggressive1 (See Appendix B, Page 5)

Root causes of patient/visitor violence can be traced to the interface between patient, staff, and contributing environmental factors1,3,5-7 (See Appendix C, Page 6)

As staff becomes more aware of the patient’s perspective, adjustments can be made to their own behavior to take account of the patient’s difficulties, which can lead to a measurable reduction in conflicts6

Staff must assess what the patient understands, how patients are processing what is happening, and give patients time to process the information6

Early and appropriate medication to manage withdrawal symptoms can enhance patients’ sense of trust in staff and environment5

RECOMMENDATIONS: The following evidence-based recommendations are offered for registered nurses and clinical leaders to consider when caring for hospitalized adults who have or may have behavioral health issues.

- Caring relationships are foundational: Cultivate a patient, a family, and a staff-centered caring culture3,5-7 (See Appendix A, Page 4)
- Develop an awareness of factors that move patients/visitors to behave aggressively and violently (i.e. patient diagnosis, medical condition, cognitive functioning, and frustration/anxiety with care environment)1,3,5-7
  - Conduct routine risk assessments of staff attitudes/behaviors,1-3,5-7 at-risk patients1,3,5-7 and environmental factors2,3 (See Appendix A, Page 4; See Appendix C, Page 6)
  - Become aware of biases in order to develop empathy for patient/visitor situations3,5-7
- Facilitate nurse/patient and interprofessional collaborative communication by ensuring information management exists at both the individual and organizational level3
- Incorporate preadmission patient behavioral health information into an individualized plan of care1,3,5
- Provide initial and ongoing interprofessional2,3 staff education in handling difficult patient/visitor situations that have the potential for aggressive behavior and resulting violence1,3,5-7 (See Appendix D, Page 7)
  - Embed anti-violence policies/procedures into aggression management training to give healthcare staff the tools and confidence to deal with a variety of violent scenarios and each unique patient/visitor situation2,3
- Use the Cognitive Model of Patient Aggression to guide prevention and management of aggressive behaviors7 (See Appendix G, Page 12)
- Use a multifaceted systems approach to design an organizational infrastructure that supports optimal behavioral health outcomes and reduces harm1,7 (See Appendix F, Page 11)
Prevention and Management of Behavior Health Issues in the Acute Care Setting

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Topic Summary

- **Organizational Strategies**²⁻⁷
  - Behavioral Health Strategies (See Appendix E, Page 10)
  - Organizational Structures, Processes, Outcomes (See Appendix F, Page 11)
  - Cognitive Model of Patient Aggression towards Healthcare Staff (See Appendix G, Page 12)
    - Represents the situation for patients in general hospital; might be generalized to psychiatric settings
    - Identifies anxiety that generates hyper-vigilance for perceived threatening stimuli, induces selective attentional bias from that threat, and causes a narrowing of attention⁶
      - Increased patient anxiety can have a negative effect upon cognitive processing⁶
    - Cues are then reduced due to anxiety with decreased information upon which to make accurate appraisals and attributions⁶
    - Impaired patients may make negative attributions (staff’s actions are threatening) rather than positive (staff’s actions are benign) attributions; frequently provoking anxiety⁶
      - *Example*: Patient perceives staff behavior as threatening rather than benign. If there is a lack of positive attributions, its absence will trigger an aggressive response⁶
  - Interdisciplinary task force³
  - Employee Support Program Aggression Management Policies & Procedures²⁻³
    - Establishes an anti-violence official position²⁻³
      - Strong organizational commitment is imperative to prevent or reduce²⁻³
      - Official policy and position against workplace violence³
    - Reporting policy with non-punitive reporting³
      - Non-punitive reporting allows organization to eliminate barriers in reporting violent incidents and to optimize learning for future prevention³
    - Staff felt more confident with an official position and strategy against violence³
      - Absence of organizational policies/procedures about violence can negatively influence staff confidence levels³

- **Risk Assessment: Patient Attitudes and Behaviors**¹⁻⁶⁻⁷
  - Patient Attitudes⁶⁻⁷
    - Anxiety that generates hyper-vigilance, selective attentional bias, and narrowing of attention⁷
  - Negative attributions to actions of staff⁷ and disagreement with care⁶
  - Patient behaviors exacerbated by inconsistency imposed by different staff between and within shifts¹

- **Risk Assessment: Staff Attitudes & Behaviors**¹⁻⁷
  - Staff Attitudes⁵
    - Negative and stereotypical attitudes toward patients with problematic drug use⁵
    - Lack of knowledge to care⁵
    - Distrust and detachment⁵
    - Dissonant care⁵
  - Assessment of staff’s actions¹⁻⁶⁻⁷
    - Inconsistency imposed by different staff between and within shifts¹
    - Persuasion interpreted as coercion⁷
    - Planned nursing actions as necessary or can it be delayed⁶
  - Time period staff seeks information regarding presence of possible risk factors¹
    - Starting caring for the patient (24%-42% of the time)¹
    - First incident of behavioral problems(23% of the time)¹
    - Only when staff has time (4% of the time)¹
    - Not at all (3% of the time)¹
### Relationships Across the Care Continuum

<table>
<thead>
<tr>
<th><strong>Primacy of Caring:</strong> Staff Awareness of Patient Perspective&lt;sup&gt;3, 5-7&lt;/sup&gt;</th>
<th><strong>Patient Processing of Information</strong>&lt;sup&gt;6&lt;/sup&gt;</th>
</tr>
</thead>
</table>
| • Understanding the patient’s perspective can assist in decreasing incidents of aggression and violence towards hospital staff (See Appendix F, Page 11)<sup>6</sup>  
• Consider physiological, psychological, and emotional state of patients/visitors and sociocultural and capacity issues<sup>3</sup>  
• Emphasize primacy of nurse-patient relationship  
  ▪ Teach how to “get to know” the patient<sup>5</sup>  
• Key to Care Delivery: Understanding the person behind the problem drug use and addiction<sup>5</sup>  
• Staff need to appreciate the extent to which patients who appear not to understand what is happening to them, require additional time and effort from staff to ensure understanding of events and enable them to give their consent<sup>6</sup>  
• If healthcare staff could be made more aware of the patient’s perspective, they would be able, where necessary to adjust their behavior to take account of the patient’s difficulties, leading to a measurable reduction in conflicts<sup>7</sup> |
| • Staff need to assess if patients appear not to understand what is happening to and around them<sup>6</sup>  
• May require additional time and effort to ensure patient understanding of events and to enable them eventually to give their consent<sup>6</sup>  
• May need longer time to process information at all levels and even having processed it may still not understand or be unwilling to succumb to the staff wishes and requests<sup>6</sup>  
• Persuasion by hospital staff might be interpreted as coercion by patient<sup>6</sup>  
• Is planned care necessary at that particular time OR can it be delayed?<sup>6</sup>  
• Patient’s feeling of arousal likely to increase and cognitive function might decrease even further<sup>6</sup> |

<table>
<thead>
<tr>
<th><strong>Nurse-Patient Communication</strong>&lt;sup&gt;3, 5-7&lt;/sup&gt;</th>
<th><strong>Establishing Trust</strong>&lt;sup&gt;6&lt;/sup&gt;</th>
</tr>
</thead>
</table>
| • Interdisciplinary Collaboration Team  
  ▪ Identify, assess, and analyze risk factors for each type of setting in order to develop a nuanced approach to design and implementation of appropriate prevention strategies<sup>3</sup>  
• Information management (individual and organizational levels)<sup>3</sup>  
• Primacy of nurse-patient relationship: get to know the patient, understand the person behind the problem<sup>5</sup>  
• Take time to understand the patient’s perspective<sup>7</sup>  
• Allow more flexibility for service delivery  
  ▪ Example: Adjust bathing schedule to patient preference versus to accommodate staff/units needs<sup>7</sup>  
• Better communication between community drug team and hospital staff<sup>5</sup>  
• Nurses should take time to help patients understand what is happening to and around them in order to engage patients and get consent for care<sup>6</sup>  
• Persuasion might be misinterpreted as coercion. Patients are likely to need longer time to process information<sup>6</sup> |
| • Distrust and negative attitudes often characterize the nurse-patient relationship if the patient is a Problem Drug User (PDU) or uses illicit drugs<sup>5</sup>  
  ▪ Complexity of managing and delivering care, interplay between perceptions, attitudes, and behavior can lead to distance and escalation of distrust between nurses and patients<sup>5</sup>  
• Early use of appropriate medication to manage symptoms of withdrawal for PDUs might offer a stable platform for establishing social reciprocity as the basis for a person-centered approach<sup>5</sup>  
  ▪ Involvement of service users (people who use illicit drugs) as peer mentors in any educational initiatives  
    ▪ Assist in having nurses, see the person behind the drugs  
    ▪ Ultimately enable RNs to manage/deliver more competent and empathetic care to patients<sup>5</sup> |
Patient Visitor Violence (PVV) Definition: Any verbal, non-verbal or physical behavior that is threatening to staff/property or physical behavior that harms healthcare staff or damages property (Morrison, 1990)³
- Aggressive incidents occur across all health care settings²
- Most often reported in documentation (36.6%) (only 1.1% provided official reporting)³
- PVV occurred at least once a year in 50% of staff at a Swiss university general hospital³

PVV Costs: Emotional, Financial, Organizational² (See Appendix F: Outcomes, Page 11)
- Staff relief during training²
- Refresher course costs²
- Balance with personal + emotional costs along with financial/organizational costs of staff members being severely assaulted²
- Effects of violence are wide and varied, including increased absenteeism, sick leave, property damage, decreased productivity, security costs, litigation, workers compensation, reduced job satisfaction together with recruitment and retention issues²

Appendix B
Categories of Problem Patient Behaviors

<table>
<thead>
<tr>
<th>Physically Aggressive¹</th>
<th>Physically Non-Aggressive¹,⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Combative during nursing care (most difficult to manage)¹</td>
<td></td>
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<tr>
<td>- Attempting to elope from facility¹</td>
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<tr>
<td>- Dangerous behaviors (to self or others)¹</td>
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<tr>
<td>- Destroying property¹</td>
<td></td>
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<tr>
<td>- Hitting, scratching, pushing, spitting, kicking¹</td>
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<tr>
<td>- Pulling out IV’s, catheters, or tearing bandages¹</td>
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<tr>
<td>- Temper outbursts¹</td>
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<tr>
<td>- Appearing anxious¹</td>
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<tr>
<td>- Climbing out of bed¹</td>
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<tr>
<td>- Crying and tearfulness</td>
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<tr>
<td>- Difficulty concentrating¹</td>
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<tr>
<td>- Difficulty sleeping¹</td>
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<tr>
<td>- Do not understand what is happening to them/around them⁷</td>
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</tr>
<tr>
<td>- Memory problems¹</td>
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<tr>
<td>- Refuse nursing care¹</td>
<td></td>
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<tr>
<td>- Sad or depressed¹</td>
<td></td>
</tr>
<tr>
<td>- Wandering or pacing¹</td>
<td></td>
</tr>
<tr>
<td>- Worried¹</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Verbally Aggressive¹</th>
<th>Verbally Non-Aggressive¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Commenting about death of self or others¹</td>
<td></td>
</tr>
<tr>
<td>- Sexual commenting¹</td>
<td></td>
</tr>
<tr>
<td>- Temper outbursts¹</td>
<td></td>
</tr>
<tr>
<td>- Yelling out¹</td>
<td></td>
</tr>
<tr>
<td>- Arguing and/or irritable¹</td>
<td></td>
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<tr>
<td>- Asking repetitive questions¹</td>
<td></td>
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<tr>
<td>- Requests for attention¹</td>
<td></td>
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<tr>
<td>- Talk about feeling worthless (failure; burden to others)³</td>
<td></td>
</tr>
<tr>
<td>- Talking too loudly and rapidly¹</td>
<td></td>
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<tr>
<td>- Whining or complaining¹</td>
<td></td>
</tr>
</tbody>
</table>
## Root Causes of Patient/Visitor Violence

### Contributing Environmental Factors

- General hospital setting
- Emergency departments
- Recovery rooms
- Anesthesia/Intermediate/Step Down Units
  - Too much noise
- Intensive care units
- All Settings
  - Waiting
  - Having to endure several exams/tests
  - Having too little time
- Enforcement of institutional bans (Rehab units only)

<table>
<thead>
<tr>
<th>Patient Demographics</th>
<th>Staff Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male gender aged men between 50-74 years</td>
<td>Enforcing personal patient and medical care</td>
</tr>
<tr>
<td>Behavioral observation from a previous setting</td>
<td>Delivery of an anxiety-provoking patient care experience</td>
</tr>
<tr>
<td>Mental/behavioral issues including</td>
<td>Often the antecedents of aggressive encounters</td>
</tr>
</tbody>
</table>
  - Cognitive impairment with diminished perceptions |
  - Confusion |
  - History of psychiatric illness/violent behavior |
| Early detection of illicit drug use and addiction | Emotionally draining experience to care for patients with illicit drug use |
| Dissonant care management/delivery explains complexity of nurse-patient interaction and relationships in delivery of care to problem drug users | Intervening in patient’s intended behavior |
  - Lack of knowledge to care |
  - Distrust and detachment |
  - Care management often confused, chaotic, and disruptive |
| Physiological: Medical Conditions (not specific) | Level of information received from patient (often difficult to obtain information from patient/family) |
  - Cardiovascular condition |
  - Blood, hematopoietic, immune system |
  - Nervous system |
  - Neoplasm/tumor |
| Psychological State | Direct patient contact, particularly for nursing staff (56%) |
| Patient/Visitor Emotional State | More experience in healthcare |
  - Anxiety |
  - Excessive demands |
  - Insecurity with the situation |
  - Disagreeing or dissatisfaction with therapy |
| Level of information/communication from staff | |
| Hospitalization Experience | |
  - Preadmission |
  - During hospitalization stay |
  - Being discharged |
| Sociocultural and capacity issues | |
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Staff Confidence

- Staff very confident in responding to most frequently observed behavioral disturbances; describe as “more irritating than worrisome”
  - Verbal aggression, difficulty concentrating, appearing anxious, worried or sad, whining or complaining, difficulty sleeping, pulling out IV’s, asking repetitive questions
- Staff felt less confident to manage patients displaying less frequently observed behaviors and rated confidence as “moderate”
  - Wandering, dangerous behaviors (self or others), sexual commenting, and physically aggressive behaviors
- Medical doctors felt more confident than nurses in managing both verbal and physical aggression

Appendix D

Aggression Management Programs (AMP) Training

<table>
<thead>
<tr>
<th>AMP Content Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multidisciplinary Team</strong></td>
</tr>
<tr>
<td>- Care management/coordination across the team</td>
</tr>
<tr>
<td>- Leadership and management (core group)</td>
</tr>
<tr>
<td>- Orientation to workplace environment, aggression/violence management policies and standards, grievance procedures</td>
</tr>
<tr>
<td>- Assertiveness training, self-defense</td>
</tr>
<tr>
<td>- Legal and ethical concepts</td>
</tr>
<tr>
<td>- “Costs” of violence</td>
</tr>
<tr>
<td>- Reporting aggressive behavior incidents</td>
</tr>
<tr>
<td><strong>Aggression Assessment</strong></td>
</tr>
<tr>
<td>- Identification of potentially violent situations via risk assessments</td>
</tr>
<tr>
<td>- Risk assessment for causes of aggression, behavioral theories, disease processes</td>
</tr>
<tr>
<td>- Risk assessment for types of aggression (physical, psychological, verbal abuse)</td>
</tr>
<tr>
<td><strong>Aggression Prevention</strong></td>
</tr>
<tr>
<td>- Communication, therapeutic relationships, defusion techniques</td>
</tr>
<tr>
<td>- Body language of staff and patient</td>
</tr>
<tr>
<td>- Pharmacological management</td>
</tr>
<tr>
<td>- Situational and environmental factors influencing violent behavior</td>
</tr>
<tr>
<td><strong>Aggression Management</strong></td>
</tr>
<tr>
<td>- Pharmacological management</td>
</tr>
<tr>
<td>- Physical restraint</td>
</tr>
<tr>
<td>- Risks of applying restraints</td>
</tr>
<tr>
<td>- Seclusion</td>
</tr>
<tr>
<td>- Debriefing and counseling post violent incident</td>
</tr>
<tr>
<td><strong>AMP Evaluation</strong></td>
</tr>
<tr>
<td>- Systematic evaluation beyond subjective participant responses</td>
</tr>
</tbody>
</table>

Education & Training

- Registered nurses in acute care settings require education and training to understand problem drug use and addiction, to manage withdrawals and related behavior
  - Survey information can assist in designing training and interventions that will target the gaps in knowledge and help address the most challenging patient behaviors
- Targeted initial/ongoing education and training for acute care setting with refresher courses
  - Programs improve self-efficacy and preparation in managing aggressive patients/situations
    - Maintain accreditation/competency
    - Increased knowledge, skills, attitudes, and confidence
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- Specialized training on verbal communication skills and improving professional skills
  - Educators and Trainers
    - Involve service users as peer mentors in training, including people who use illicit drugs
- Targeted education and training components include:
  - How to approach a patient
  - How to stay physically safe
  - Stress management
  - How to verbally de-escalate a patient
  - Environmental aids/considerations
  - Education about related disorders and understanding the etiology of behavior problems
  - How to support and include families in the care of the patient
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References


NOTE: This review excluded information regarding verbal de-escalation techniques. Evidence and information for this intervention can be found in the 2014 integrative review titled “Verbal De-Escalation Strategies in the Acute Care Setting” (Hong-No, Rondinelli, & Crawford, 2014) and found at http://kpscnursingresearch.org/integrative-reviews.
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Appendix E
Behavioral Health Strategies

Potential aggressive/violent event

CARE

PATIENT + FAMILY/VISITOR
1,3,5-7

CARE EXPERIENCE
1,3,4-7

NURSE + CARE TEAM
1-7

COMMUNITY + CARE CONTINUUM

ORGANIZATIONAL STRUCTURE
3,4,5,7

PROCESSES
3,5,7

OUTCOMES
1-7
### Evidence-Based Behavioral Health Strategies

#### Organizational Structures, Processes, Outcomes

<table>
<thead>
<tr>
<th>Structures&lt;sup&gt;3,7&lt;/sup&gt;</th>
<th>Processes&lt;sup&gt;2,5,7&lt;/sup&gt;</th>
<th>Outcomes&lt;sup&gt;1,7&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Multifaceted organizational approach&lt;sup&gt;2&lt;/sup&gt;</td>
<td>o Separately identify, assess, and analyze risk factors for each type of setting&lt;sup&gt;3&lt;/sup&gt;</td>
<td>o Aggression Minimization Programs&lt;sup&gt;2,7&lt;/sup&gt; on Patient Outcomes&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>o Interdisciplinary team&lt;sup&gt;2,3&lt;/sup&gt;</td>
<td>o Implement Care Model&lt;sup&gt;6&lt;/sup&gt;</td>
<td>▪ Lower incidence of aggression&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>o Care Model (such as Cognitive Model of Patient Aggression towards Health Care Staff)&lt;sup&gt;9&lt;/sup&gt;</td>
<td>o Staff education/training during orientation and annual refresher courses&lt;sup&gt;2,7&lt;/sup&gt;</td>
<td>▪ Restraint-associated complications&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>o Employee Support Programs&lt;sup&gt;3&lt;/sup&gt;</td>
<td>o Managerial Support&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Integral in moving debate from an individual concern to organizational concern&lt;sup&gt;2&lt;/sup&gt;</td>
<td>o Aggression Minimization Programs on Staff Outcomes&lt;sup&gt;4,7&lt;/sup&gt;</td>
</tr>
<tr>
<td>o Care standards&lt;sup&gt;3,7&lt;/sup&gt;</td>
<td>o Short Term PVV Interventions&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Awareness of risk of violence&lt;sup&gt;4,7&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Promote communication skills and clear information management system at individual/organizational level&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Calming and informative discussion&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Confidence, trust, and attitudes&lt;sup&gt;4,6&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Consider patient/visitor physiological, psychological, emotional state, and sociocultural and capacity issues&lt;sup&gt;5&lt;/sup&gt;</td>
<td>▪ Leaving situation&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Improve knowledge and reporting of violence&lt;sup&gt;4,5&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Stable, calm, standardized care to patients with problematic drug use&lt;sup&gt;5&lt;/sup&gt;</td>
<td>▪ Urging patient to stop behavior&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Improve skills in dealing with aggression&lt;sup&gt;9&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Nuanced approach to development and implementation of appropriate prevention strategies&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Administration of prescribed medication&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Effects/Consequences of PVV: Emotional, Financial, Organizational Costs&lt;sup&gt;1,3&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Flexibility in service delivery&lt;sup&gt;7&lt;/sup&gt;</td>
<td>o Long Term PVV Interventions&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Staff relief during training&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Environmental factors&lt;sup&gt;3,4&lt;/sup&gt;</td>
<td>▪ Shielding from precipitating stimuli&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Initial training/refresher course costs&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Decrease wait time for exams/tests&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Avoid coercive measures: Ward transfer, Chemical/Mechanical Restraints&lt;sup&gt;3,4&lt;/sup&gt;</td>
<td>▪ Balance personal + emotional + financial/organizational costs of staff being severely assaulted&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Increase time spent with patient&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Pharmacological (Close monitoring&lt;sup&gt;3,4&lt;/sup&gt;)</td>
<td>▪ Increased absenteeism&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Reduce noise levels&lt;sup&gt;3&lt;/sup&gt;</td>
<td>▪ Droperidol/Midazolam: More rapid sedation effect than lorazepam or haloperidol&lt;sup&gt;4&lt;/sup&gt;</td>
<td>▪ 1-5 days or longer than a week of sick leave&lt;sup&gt;2,3&lt;/sup&gt;</td>
</tr>
<tr>
<td>o P &amp; Ps on managing aggression&lt;sup&gt;2,3,7&lt;/sup&gt;</td>
<td>▪ Midazolam may result in greater need for active airway management&lt;sup&gt;4&lt;/sup&gt;</td>
<td>▪ Medical treatment&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>o Well-designed interprofessional staff education &amp; Aggression Minimization Programs (AMP) training programs&lt;sup&gt;2,7&lt;/sup&gt;</td>
<td>▪ Elderly have more adverse events and greater incidence of excessive sedation&lt;sup&gt;4&lt;/sup&gt;</td>
<td>▪ Property damage; ruined glasses or clothing&lt;sup&gt;2,3&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Current standards for chemical restraints (monitor adverse effects)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>▪ Mechanical Restraints: With proper use, can be effective in reducing harm to patient/staff; have minimal complications if used for short periods&lt;sup&gt;4&lt;/sup&gt;</td>
<td>▪ Decreased productivity&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>▪ Current standards for mechanical restraints with low rates of complications&lt;sup&gt;4&lt;/sup&gt;</td>
<td>▪ Psychosis most frequent diagnosis for restraint&lt;sup&gt;4&lt;/sup&gt;</td>
<td>▪ Security costs, litigation&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Employ a systematic evaluation beyond satisfaction data of subjective responses of participants<sup>1</sup>

| ▪ Aggression Minimization Programs<sup>2,7</sup> on Patient Outcomes<sup>4</sup> |
| ▪ Managerial Support<sup>2</sup> |
| ▪ Shielding from precipitating stimuli<sup>3</sup> |
| ▪ Calming and informative discussion<sup>3</sup> |
| ▪ Leaving situation<sup>3</sup> |
| ▪ Urging patient to stop behavior<sup>3</sup> |
| ▪ Administration of prescribed medication<sup>3</sup> |
| ▪ Short Term PVV Interventions<sup>3</sup> |
| ▪ Well-designed interprofessional staff education & Aggression Minimization Programs (AMP) training programs<sup>2,7</sup> |
| ▪ Long Term PVV Interventions<sup>3</sup> |

### Effects/Consequences of PVV: Emotional, Financial, Organizational Costs<sup>1,3</sup>

- Staff relief during training<sup>2</sup>
- Initial training/refresher course costs<sup>2</sup>
- Balance personal + emotional + financial/organizational costs of staff being severely assaulted<sup>2</sup>
  - Increased absenteeism<sup>2</sup>
  - 1-5 days or longer than a week of sick leave<sup>2,3</sup>
  - Medical treatment<sup>1</sup>
  - Property damage; ruined glasses or clothing<sup>2,3</sup>
  - Decreased productivity<sup>2</sup>
  - Security costs, litigation<sup>2</sup>
  - Workers compensation<sup>2</sup>
  - Reduced job satisfaction<sup>2</sup>
  - Anxiety, insecurity, excessive demands<sup>3</sup>
  - Staff frustration if patient inappropriately placed in less restrictive unit<sup>1</sup>
  - Recruitment and retention issues<sup>2</sup>
  - Upsetting Emotional/Physical Impacts<sup>3</sup>
  - More staff upset when experiencing verbal aggression than physical aggression<sup>4</sup>

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Database search conducted and coordinated by Frances Chu and Kristyn Gonnerman
Appendix G

Cognitive Model of Patient Aggression towards Health Care Staff: Patient’s Perspective

As patients appraise their situation, they may perceive negative attributions such as “the nurses are trying to hurt me” versus positive attributions such as “the nurse says it time for me to walk.” Staff should maintain patient perceptions of positive attributions, as seen in the red outline of the model. Otherwise, perceived threatening situations and other stimuli may provoke the patient to take fight or flight action, as illustrated by the negative affect pathways of the model.


Identifies anxiety that can generate hyper-vigilance for perceived threatening stimuli. Anxiety then induces selective attentional bias from that threat and causes a narrowing of attention. Results in increased patient anxiety, which can have a negative effect upon cognitive processing. Cues are then reduced with decreased information the patient would use to make accurate appraisals and attributions. Impaired patients may make negative attributions (staff’s actions are threatening) rather than positive (staff’s actions are benign) attributions; frequently provoking anxiety.6
Evidence Search Strategies: An integrative review on the selected clinical questions was conducted from March 2014 to August 2015 to determine the quantity, quality and consistency of the evidence. This scoping review examined the evidence for the best practices/strategies that could assist the registered nurse with the care of nonaggressive and/or aggressive adult hospitalized medical/surgical, critical care, and maternal child health patients who have been diagnosed with or may have behavioral health issues. A review of the research evidence from 2004 to 2014 was conducted via electronic databases (PubMed, CINAHL [Cumulative Index of Allied Health Literature]), EMBASE, PsychINFO, Cochrane Library, and American Psychiatric Nurses Association). Search terms included “hospitalized patients”, “acute care” and “aggressive behavior”, “aggressiveness”, “patient violence”, “anger”, “hostile”, and “violent”, either alone or in combination. Searches were individualized for each database. (See Database Search Methodology, Pages 14 to 16).

This review yielded 171 relevant hits. Librarians eliminated all duplicates during the database search. 163 articles were selected for inclusion. After careful examination, 157 articles were eliminated as they did not answer the clinical question, focused on instrument development and/or testing, or targeted inappropriate patient populations and/or institutional settings. Six studies were identified that addressed the clinical questions. One additional article comparing aggressive management programs was obtained, for a total of 7 articles that pertained to the clinical area of inquiry. The articles were ranked using the Academy of Evidence-Based Practice Evidence Leveling System and graded using the Johns Hopkins Evidence Appraisal tools (See Page 17). The strength of the evidence ranged from low quality, moderate quality, and high quality.

Evidence Review Results: The evidence consisted of 1 systematic review, 2 cross sectional survey descriptive studies, 2 qualitative studies (grounded theory, prospective interviews), 1 literature review, and 1 consensus of experts for an empirically-based model. Result limitations include the inability to generalize results to the acute care setting, as the majority of research related to patients with behavioral health issues is being conducted in emergency rooms, prisons, jails, and inpatient psychiatric facilities. Other methodological issues include sample size and nonrandom sampling technique. Evidence for maternal child health patients could not be located. Although managerial support and interprofessional teams were identified as essential, there was little supporting evidence. Additional limitations include (1) a lack of accurate psychological/organizational costs associated with workplace aggression and (2) a multitude of diverse interventions for behavioral health programs and/or aggression management programs design, implementation, and evaluation. However, the information in this review provides the best available evidence to date for frontline clinicians to prevent and manage behavioral health issues in acute care setting.

Future Research:
- Further research in the acute care setting, including observational studies, are needed.
- Evaluate the effects of verbal/physical interventions on violence as related to individual, interactional, and organizational factors.
- Large sample sizes for sophisticated statistical analyses.
- To date, the violent situations have primarily been investigated from the use staff’s experiences.
- Further research in the acute care setting, including observational studies, are needed.

NOTE: This review excluded information regarding verbal de-escalation techniques. Evidence and information for this intervention can be found in the 2014 integrative review titled “Verbal De-Escalation Strategies in the Acute Care Setting” (Hong-No, Rondinelli, & Crawford, 2014) and found at http://kpscnursingresearch.org/integrative-reviews.
**Prevention and Management of Behavior Health Issues in the Acute Care Setting**

*An Integrative Scoping Review of the Evidence*

**Electronic Database Search Methodology**

**Date(s):** March 2014 through May 2014

<table>
<thead>
<tr>
<th>Database</th>
<th>Key Word(s) and/or Controlled Vocabulary Terms</th>
<th>Total References Identified (hits)</th>
<th>No. of Relevant References</th>
<th>No. of Total Duplicate Articles</th>
<th>No. of Articles Selected for Review</th>
<th>No. of Articles Excluded</th>
<th>Final Total Relevant References</th>
</tr>
</thead>
</table>
| **Name: PubMed #1 + PubMed #2**  
**Years: 2004-2014** | Inpatient + aggression OR workplace violence OR dangerous behavior/nursing | 103 | 62 | 0* | 62 | 60 | 2 |
| **Name: Embase**  
**Years: 2004-2014** | Hospital patient OR problem patient + aggression OR violence OR anger OR hostility | 176 | 29 | (duplicates eliminated by Librarians during search) | 21 | 21 | 0 |
| **Name: CINAHL**  
**Years: 2004-2014** | Hospital patient OR problem patient + aggression OR violence OR anger OR hostility | 56 | 39 | (duplicates eliminated by Librarians during search) | 39 | 38 | 1 |
| **Name: Cochrane Library**  
**Years: Open** | Violent OR disruptive OR aggressive patient behavior + acute care | 36 | 0 | N/A | 0 | 0 | 0 |
| **Name: PsychINFO**  
**Years: 2004-2014** | Hospitalized patient + aggressive behavior OR aggressiveness OR patient violence OR anger OR hostile OR violent | 41 | 41 | (duplicates eliminated by Librarians during search) | 41 | 38 | 3 |
| **Name: American Psychiatric Nurses Association**  
**Years: Open** | Hospitalized patient + aggressive behavior | 1 | 1 | N/A | 1 | 0 | 0 |

**TOTALS**  
412  
171  
0  
163  
157  
6

*Reference/Contextual Links*  
*Additional articles/information found in references lists and/or article review*


#Controlled vocabulary (subject terms, MESH terms, tagged terms specific to database)  
*Use first database as main comparison for subsequent database searches and identifying duplicate articles*

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Database search conducted and coordinated by Frances Chu and Kristyn Gonnerman
# Prevention and Management of Behavior Health Issues in the Acute Care Setting

*An Integrative Scoping Review of the Evidence*

<table>
<thead>
<tr>
<th>Clinical Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population and/or Patient(s)</strong></td>
</tr>
<tr>
<td>P: Adult hospitalized medical/surgical, critical care, and maternal child health patients</td>
</tr>
</tbody>
</table>

**Final Clinical Questions:**
1. "What are the best practices/strategies that can assist the RN with the care of adult hospitalized medical/surgical and critical care patients who have been diagnosed with or may have behavioral health issues?"
2. "What are the best practices/strategies that can assist the RN with the care of aggressive and/or violent adult hospitalized medical/surgical and critical care patients who have been diagnosed with or may have behavioral health issues?"

**Final Searchable Question**

**Key Search Terms:** Individualized per database for disruptive and violent patient behavior + acute care + adults (Example: hospitalized patients *AND Any Field* (aggressive behavior OR aggressiveness OR patient violence OR anger OR hostile OR violent) *AND Year:* (2004 to 2014))

**Inclusion Criteria:** Acute care hospitalized setting (medical/surgical, critical care, maternal child health patients); nurses only; nursing care; mental health; psychiatric behavioral health; successful practices/interventions/techniques; prevention/de-escalate/management techniques; disruptive and/or violent behavior, exacerbation of behavioral health/mental health conditions; physical/environmental interventions (i.e. restraints, seclusion, pharmacological therapy)

**Exclusion Criteria:** Verbal de-escalating interventions/techniques (completed by 2014 Nursing Research Resident); emergency department, ambulatory settings, psychiatric hospitals/units, prisons, and areas other than acute care hospital; healthcare professionals other than nursing; dementia; delirium

**Limitors:** 2004 to 2014

**Databases:** PubMed, EMBASE, CINAHL, Cochrane Library

**Professional Organizations:** American Psychiatric Nurses Association

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Database search conducted and coordinated by Frances Chu and Kristyn Gonnerman
Prevention and Management of Behavior Health Issues in the Acute Care Setting

An Integrative Scoping Review of the Evidence

Evidence Search Databases
Conducted March to May 2014

PubMed (n = 62) PsychInfo (n = 41) CINAHL (n = 56) EMBASE (n = 29) Cochrane (n = 36)

Professional Organizations: American Psychiatric Nurses Association

Search Terms: Individualized per database for disruptive, violent patient behavior + acute care + adults
(Example: hospitalized patients AND Any Field: (aggressive behavior OR aggressiveness OR patient violence OR anger OR hostile OR violent)

Limits: English; over 18 years of age; 2004 to 2014

Inclusion Criteria: Acute care hospitalized setting (medical/surgical, critical care, maternal child health patients); nurses only; nursing care; mental health; psychiatric behavioral health; successful practices/interventions/techniques; prevention/de-escalate/management techniques; disruptive and/or violent behavior, exacerbation of behavioral health/mental health conditions; physical/environmental interventions (i.e. restraints, seclusion, pharmacological therapy)

Exclusion Criteria: Verbal de-escalating interventions/techniques (completed by 2014 Nursing Research Resident); emergency department, ambulatory settings, psychiatric hospitals/units, prisons, and areas other than acute care hospital; healthcare professionals other than nursing; dementia; delirium

Full text articles excluded (n = 8)
- Did not answer clinical question
- Inappropriate patient population
- Inappropriate institutional settings
- Outside year limits

Full text articles excluded (n = 157)
- Did not answer clinical question
- Inappropriate patient population
- Inappropriate institutional settings
- Outside year limits

Contextual Articles (n = 3)
Did not answer clinical question (n = 2)
## Prevention and Management of Behavior Health Issues in the Acute Care Setting

*An Integrative Scoping Review of the Evidence*

### Academy of Evidence-Based Practice® (EBP)
**Evidence Leveling System (ELS)**

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>DESCRIPTION</th>
<th>RELEVANT ARTICLES</th>
<th>ARTICLE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Meta-analysis of multiple large sample or small sample* randomized controlled studies, or meta-synthesis of qualitative studies with results that consistently support a specific action, intervention, or treatment</td>
<td>1</td>
<td>#4</td>
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<tr>
<td>B</td>
<td>Well-designed controlled studies, both randomized and nonrandomized, prospective or retrospective studies, and integrative reviews with results that consistently support a specific action, intervention, or treatment</td>
<td>4</td>
<td>#1, #3, #5, #7</td>
</tr>
<tr>
<td>C</td>
<td>Qualitative studies, descriptive or correlational studies, integrative reviews, systematic reviews, or randomized controlled trials with inconsistent results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Peer-reviewed professional organizational standards, with clinical studies to support recommendations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Theory-based evidence from expert opinion or multiple case reports, case studies, consensus of experts, and literature reviews</td>
<td>2</td>
<td>#2, #6</td>
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<tr>
<td>MA</td>
<td>Manufacturer’s recommendation; Anecdotes</td>
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<td>LR</td>
<td>Laws and Regulations (local, state, federal; licensing boards; accreditation bodies, etc.)</td>
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<tr>
<td><strong>Total</strong></td>
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<td>7</td>
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</tbody>
</table>

### Johns Hopkins Evidence-Based Practice Research/Non-Research Appraisal Grading

**High Quality:** Article #4

(Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence OR expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader in the field)

**Moderate Quality:** Articles #3, #5, #7

(Reasonably consistent results; sufficient sample size for the study design; some control, and fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence OR expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions)

**Low Quality:** Articles #1, #2, #6

(Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn OR expertise is not discernable or is dubious; conclusions cannot be drawn)
Prevention and Management of Behavior Health Issues in the Acute Care Setting
An Integrative Scoping Review of the Evidence

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