



Use of a Multisensory Relaxation Room to Decrease Agitation on a Geriatric Psychiatric Unit

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Learning Objectives

1. Participants will be able to define and describe the purpose of a multisensory relaxation room
2. Participants will be able to identify alternative therapeutic techniques to help a patient relax instead of resorting to the use of a PRN psychotropic medication

Agitation: What is it?¹

- Physical or mental unease
- Inner tension
- Restlessness
- Irritability
- Excitement
- Uncooperativeness
- Anxiety
- Motor activity that is excessive
- Inappropriate or purposeless
- Motor tension

Current Practices

- Antipsychotic medications are administered PRN to treat agitation
- ~80% psychiatric patients will receive PRN psychotropic medications during their inpatient stay in a psychiatric hospital^[2,3]

Psychiatric Drug Usage in U.S.A. Population^[3]

Age	Population 2014	Population 2017
0-1 Years	654	3,913
2-3 Years	3,760	27,001
4-5 Years	24,363	53,750
6-12 Years	359,882	467,500
13-17 Years	490,272	646,215
18-24 Years	599,816	1,226,552
25-44 Years	1,987,933	3,829,906
45-64 Years	2,406,526	4,203,164
65 Year +	1,169,044	2,226,888
Grand Total	6,845,303	12,625,795

Economic Impact of Mental Health

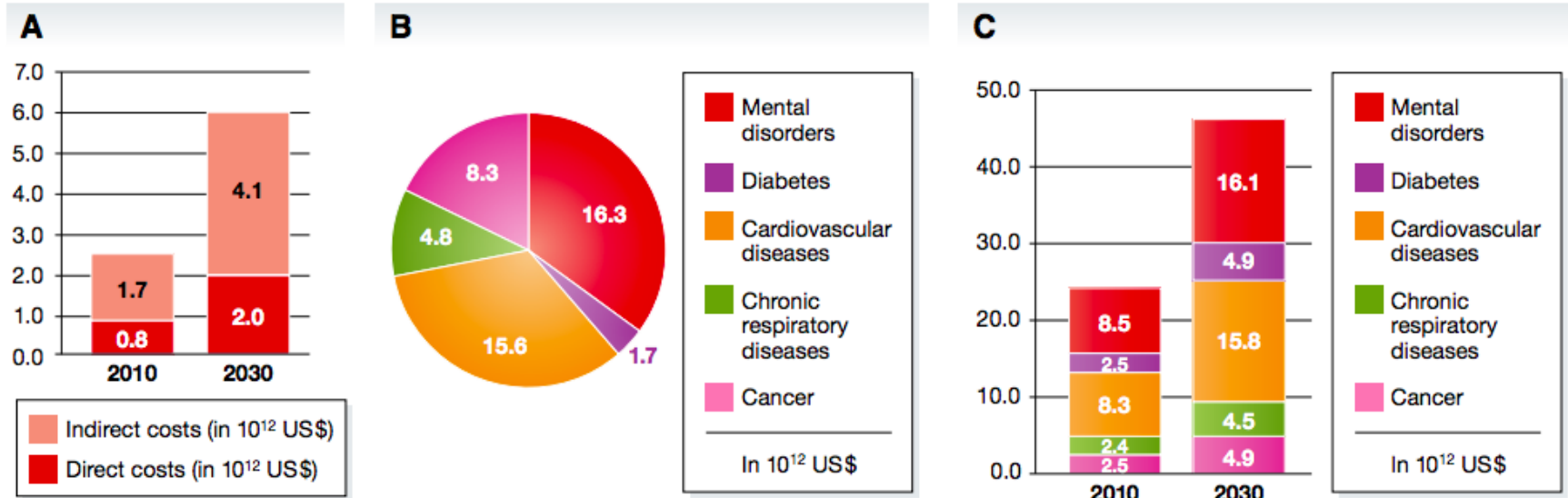


Figure 2. Economic costs of mental disorders in trillion US\$ using three different approaches: direct and indirect costs (A), impact on economic growth (B), and value of statistical life (C).

Based on data from [6].

(Data from Trautmann et al, 2016)

Significance of Problem



Agitation:

- Decreases Quality of life^[6]
- Accelerates dementia progression^[6]
- Increases care giver burden^[6]

Significance of Problem

Antipsychotic Medication:

- Increases risk of polypharmacy^[2,3]
- Significant medication-related morbidity^[2,3]
- Leads to death



Purpose



Examine the feasibility of using a multisensory relaxation room as an intervention for geriatric psychiatric inpatients who exhibit signs of mild to moderate agitation

Sample

- **Geriatric Adults:** 65+ years old
- **Psychiatric Patient:** Large 42-bed unit
- **Diagnosis:** Including not limited to
 - Neurocognitive disorder
 - Paranoia
 - Schizophrenia
 - Personality disorder



Multi-Sensory Room

Include items such as:

- Lights
- Pictures
- Painted walls
- Aromatic oils
- Music player
- Weighted blanket
- Comfortable furniture and cushions



Methods

1. Agitated patients w/mild to moderate ratings on the PAS will be escorted to multisensory relaxation room
2. Receive nonpharmacological therapeutic intervention
 - Aromatherapy
 - Music
 - Dimmed Lighted
 - Sensory Objects
3. PAS rescored after intervention

Pittsburgh Agitation Score (PAS)

Has 4 Subscales

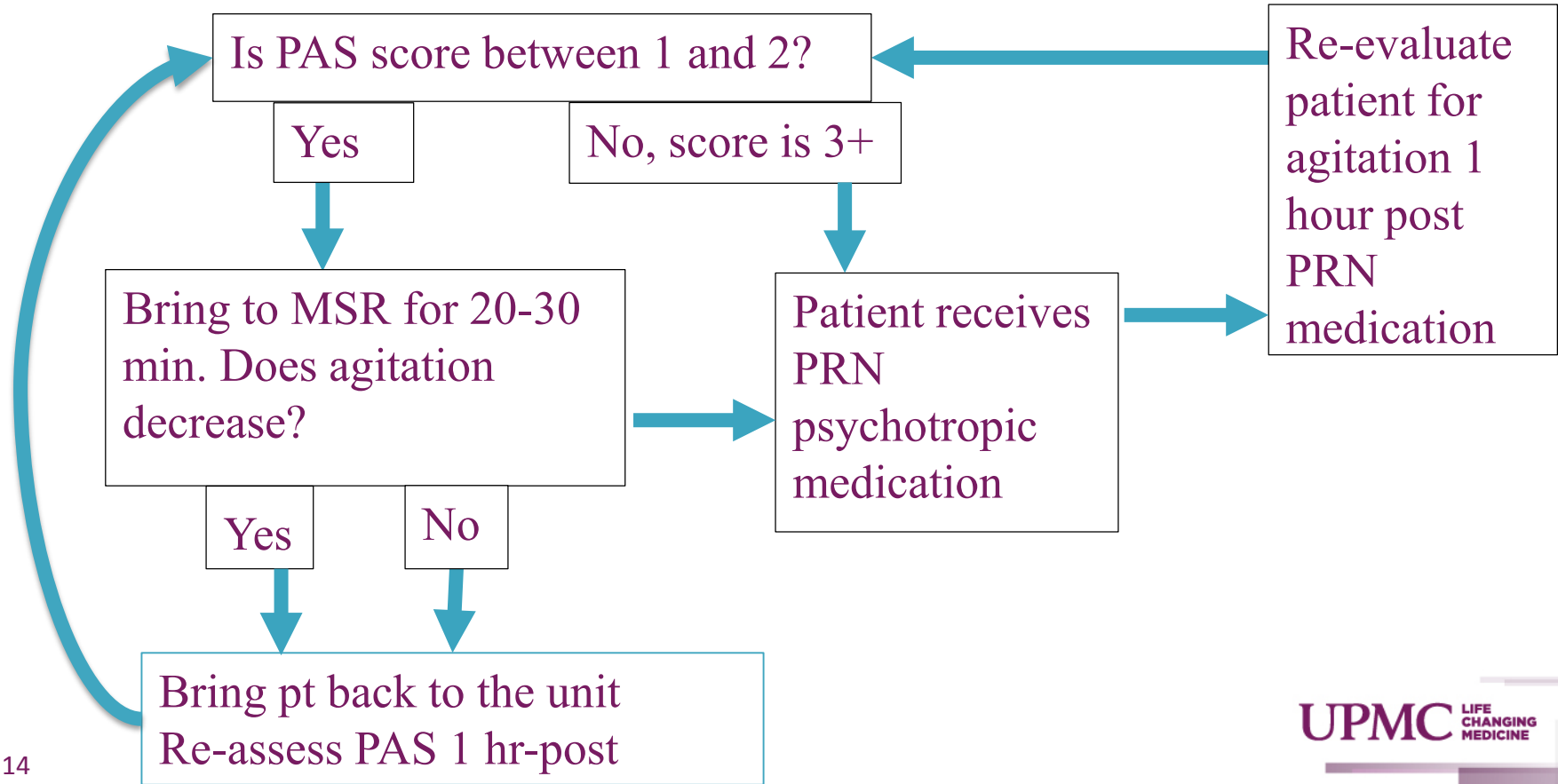
- Aberrant Vocalization
- Motor Agitation
- Aggressiveness
- Resistance of Care

Good Interclass Correlation

- Pearson Correlation btw 0.60 to 0.77 ⁷



Clinical Algorithm



Implementation

1) Approval by UPMC QI Committee

- Complete a QI submission form

2) Training

- Education during staff meetings

3) Piloting

- Print instructions → Hang on Walls
- Allow time for staff feedback/concerns

Implementation

4) Rolling Out

- Examine areas for improvement
- Make changes as necessary

5) Sustainability

- Use of team huddles
- Motivation/Engagement



Results: Descriptive Data

(n=15)

	Range	Mean
Age	25 – 85 years old	67 years old

Race	Percent
Caucasian	86%
African American	14%

Results: Diagnosis

- Bipolar Disorder Unspecified
- Borderline Personality Disorder
- Major Depressive Disorder
- Schizophrenia Unspecified
- Unspecified Dementia
- Unspecified Nonpsychotic Mental Disorder
Following Organic Brain Damage

Results: PAS

A sample of 15 patients used the MRR 25 times

	Pre-score t-test means	Post-scores t-test means	P-value
Vocalization	0.8636	0.2727	0.007
Motor Agitation	0.8636	0.0455	0.088
Aggressiveness	0.5000	0.0455	0.218
Resistance to Care	0.3636	0.0000	n/a

Results: PRN Medications

- Out of 25 interventions utilizing the MRR, 5 prn medications were administered post interventions
 - Within a 4 hour period
 - This is a limitation of the project
 - MRR should be a short term intervention, not long term

Discussion:

Vocalization and Motor Agitation

Clinically w/agitation we see patients:

- Yell out/Scream
- Pace hallways
- Start grabbing things

Goal is to de-escalate the situation

Sustainability Considerations

- Staffing
- Time
- Location
- Safety



Future Steps

- Expand the use of the multisensory room to other patients w/anxiety
- Build multisensory room on other units



References

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