

By Ann Brignell

# Assessment of pain in non-cognizant elderly

**T**wo relatively easy-to-administer assessment tools for identifying levels of distress and pain in the frail, non-communicative or non-cognizant elderly resident are available to caregivers in long-term care. This article will describe these tools and address their usefulness in evaluating the effectiveness of interventions intended to improve the comfort and quality-of-life for residents.

## The challenge of pain

Pain in the frail and non-cognizant elderly patient presents a significant challenge to care providers. Those who witness physical and mental decline - and with it the host of changes and problems that go with it - often feel helpless in their attempts at dealing with the accompanying pain and distress. Identifying the cause will diminish this helpless feeling and, conceivably, provide a means of managing the pain and the associated discomfort.

No convincing evidence exists proving that the onset of old age is associated with decreased ability to feel pain. Although some pain re-

searchers will debate this issue, none of the experiments to date are conclusive. The fact is that recurrent and chronic pain can be the major cause of the reduction in the quality-of-life for the elderly, both in the community and in health care facilities.

## Chronic diseases

Social history, cultural differences and individual experience influence one's ability to cope with pain. Chronic pain is less likely to be identified by the frail elderly person than a new pain. In fact, pain occurs twice as often in people over age 60 because they often have at least one of the listed chronic painful diseases.

On page 72, is a schema of six categories listing the most frequently encountered chronic diseases.

McCaffery and Beebe (1989) refer to pain as "whatever the patient says it is and occurs whenever the patient says it does." Using this ascription, one might erroneously infer that the elderly individual who does not complain of pain, or is unable to verbalize it, has no pain since he/she does

not relate their pain experience.

The most important person in describing pain is the patient. However, since many elderly cannot describe their pain or distress, it remains a challenge for caregivers to recognize the presence of pain, assess the intensity and quality, identify the etiology and implement interventions to keep them comfortable.

## Severity underestimated

Many elderly, in fact, do not express their pain because they have not been taken seriously in the past. Also, it has been shown that caregivers have a tendency to underestimate the severity of pain experienced by the elderly (Camp, 1988).

A common thread running throughout all definitions of pain is that it is a subjective experience. Because it is subjective, a basic principle of pain management is to accept unconditionally the patient/resident's report that he/she is suffering pain. From this principle, one can then set about determining, not only the existence of pain, but the level of pain

experienced - even if the patient/resident is non-communicative.

A resident's inability to communicate does not exempt care-givers from attempting to assess the presence of pain in other ways. The dedicated caregiver should be constantly alert for other means of pain expression and non-verbal behaviours that indicate pain and discomfort.

### Facial expressions

Facial expression is often the first indication of pain; in fact, it may be the only one. Facial expressions that can reflect the presence of pain include:

- clenched teeth
- tightly shut eyes, or
- wide open, sombre eyes
- biting of the lower lip
- wrinkling of the forehead
- frowning
- lack of eye contact

The Palliative Care Research Team at Saint Joseph's Health Centre in Sarnia, Ontario, working primarily with cancer patients, made careful observations of when cancer patients experienced acute, escalating pain syndromes and chronic, unrelieved pain. It was recognized that their faces reflected the pain experienced.

From this it was surmised that unrelieved pain could be observed on the face of an elderly person if the observer knew what to look for.

### Facial Grimace Scale

In 1993, a scale with six faces, adapted from Frank, Moll and Hart (1993), was developed. This six-point Facial Grimace Scale was used by three researchers in a long-term care facility. For each resident scored on the Facial Grimace Scale, the researchers either chose the same face, or were within one face (or facial score) of each other. After a second trial produced the same results in three other facilities, the scale was deemed

## Most frequent and painful chronic disorders

### Arthritis

- back pain
- peripheral joint pain

### Musculo-skeletal disorders

- compression fractures of the spine
- old hip and other fractures
- contractures

### Cancers

- bony infiltration
- nerve compression
- raised intra-cranial pressure
- therapy-related pain

### Diabetes

- peripheral neuropathy

### Cardiovascular disorders

- angina
- claudication
- cardiovascular accidents

### Other

- muscle spasm
- constipation
- candidiasis
- soft tissue or visceral damage
- ulceration
- lymphedema
- herpetic neuralgia

reliable. (See adjacent page)

Behaviour changes in the elderly who are experiencing pain have been explored by Marzinski (1991). Through experience and anecdotal evidence from care givers in long-term care who were interviewed, the research team identified a number of specific behaviours associated with pain.

Behaviour changes are of particular importance in assessing pain or distress experienced by patients. People respond to stress situations by wringing their hands, holding on to a chair for security, fidgeting with clothes, and clenching their fists. Purposeless body movements such as tossing and turning in bed or flinging arms about, often indicate discomfort. Involuntary movements such as reflexive jerking away, rhythmic body movements or rubbing body parts, may indicate pain. Posture such as slouching or a slow shuffling gait suggest dejection or physical discomfort.

### Behaviours indicating pain

- **Guarded or protective posturing**
- **Moaning or whimpering**
- **Withdrawal**
- **Restlessness**
- **Sudden quietness**
- **Changes in the following:**
  - **Gait**
  - **Social interactions**
  - **Posture**
  - **Appetite**
  - **Sleep Patterns**
  - **Facial expressions**

Tense posture and rapid, determined gait suggest anxiety and anger.

### Behaviour checklist

In 1994, the Palliative Care Research Team developed a "behaviour checklist." Following a double-blind study, the Behaviour Checklist was modified. Subsequently, both the Behaviour Checklist and Facial Grimace Scale were tested for validity and inter-rater reliability. With these results, the team moved forward to test the tools with a larger sample population in September, 1995.

This checklist can be used in conjunction with the Facial Grimace Scale to identify pain as the cause of distress. It can also be used alone to assess the efficacy of interventions when distress is not related to painful stimuli. The checklist will identify a pattern of behaviour reflective of physical, emotional, psychosocial, intellectual, cultural or spiritual distress, and measure the effectiveness of interventions.

Because many chronic diseases involve the skeleton and joints, pain is often worse upon movement. It is important, when assessments are made, that the patient is scored both at rest and during activity. The level of activity needs to be identified in order to get an accurate reading of the nature and cause of pain.

It was also found, as was men-

# Facial Grimace & Behaviour Checklist Flow Charts



**0**  
No Pain



**2**  
Mild Pain



**4**  
Discomforting



**6**  
Distressing



**8**  
Horrible



**10**  
Excruciating

Name: \_\_\_\_\_

Regular pain medication: \_\_\_\_\_ Rescue/PRN medication \_\_\_\_\_

Month: \_\_\_\_\_

Date or time:	Apr. 8 9:00 h	Apr. 9 20:00 h	Apr. 10 9:00 h												
<b>Facial Score:</b> -----															
<b>10</b>															
<b>8</b>															
<b>6</b>	√														
<b>4</b>			√												
<b>2</b>		√													
<b>0</b>															
PRN medication	n	y	y												

## Facial Grimace Score

Active  Resting  Time \_\_\_\_\_

The Facial Grimace Scale scores the level of pain (from 0 to 10 on the left) as assessed by the caregiver observing the facial expressions of the resident. Assessment is done once daily or more (14 days are indicated above). This assessment of the degree of discomfort should be done at the same time every day, and during the same level of activity. **Record if rescue/PRN medication is given: Yes (y); No (n).**

## Behaviour Checklist

Numerical rating: 0 - Never 2 - Rarely 4 - Occasionally 6 - Often 8 - Mostly 10 - Always

Date or time:	Apr. 8	Apr. 9	Apr. 10												
<b>Behaviours:</b>															
<b>Eats poorly</b>	4	4	4												
<b>Tense</b>	2	2	2												
<b>Withdrawn</b>	6	4	4												
<b>Indicates pain</b>	10	6	8												
<b>Calls out</b>	2	0	0												
<b>Paces</b>	0	0	0												
<b>Noisy breathing</b>	4	2	2												
<b>Sleeps poorly</b>	6	4	4												
<b>Rubs body part</b>	0	0	0												
<b>Moaning</b>	0	0	0												
<b>PRN medication</b>	n	y	y												
<b>Other behaviours specific to patient</b>															

Behaviour changes can be used to assess pain or distress, and thereby evaluate the efficacy of interventions. At the top of the scoring graph, when the specific behaviour has been observed, it can be rated from 10 (*Always*) to 0 (*Never*). **Dates and numbers have been filled in to exemplify.** The behaviours being rated and scored over the past 24-hours are listed down the left column. This chart scores 10 different behaviours over a 14-day period. The caregiver can expand on the checklist, i.e., rocking, fist clenching, screams, etc. **Record if rescue/PRN medications given.**

tioned earlier, that the face is usually a reflection of pain. If a resident scores high on the Facial Grimace Scale while at rest, then the cause of the discomfort may be excruciating physical pain. However, unresolved spiritual or emotional issues may be the exacerbating factors, especially if there is no history of chronic painful disease or recent diagnosis of a painful terminal illness.

Caregivers, unfortunately, do not have unlimited time to address the numerous care needs and assessment requirements of residents. In recognizing their time constraints, these assessment tools have been compressed from their original format.

Ideally, residents/patients should be scored at the same time of day and during the same level of activity or inactivity. PRN medications should be noted if given within four hours of the assessment.

It is further suggested that the tools be placed in the medication binder or kept on a clip board at the bedside. This is advised because these tools can be used to identify the level of distress in both the cognitive resident and the non-cognitive one.

In order to get an adequate baseline of behaviour to work from, three to five days of assessment is recommended where possible, before an intervention to reduce pain is started.

### **Cognitively impaired capable of using a pain scale**

“The assumption that cognitively impaired patients cannot use a pain scale is inaccurate. In one study, 65% of patients with significant cognitive impairment were able to use a word-anchored pain scale; that is, a scale with zero indicating no pain, and 5 (or 10) indicating the worst pain ever felt.

“Patients respond best when given sufficient time to process information.”

From: Ferrell, B.A., et al., Pain in cognitively impaired nursing home patients, *J. Pain Symptom Management*; 10; p.591; 1995.

Also, three to five days using an intervention, and scoring the face and behaviour during the same period, will determine if the resident is experiencing more, or less, comfort. The comfort level will be determined by the movement of the scores from a higher to lower number, the lower the number indicating a greater level of comfort and less pain.

It is very important to try only one intervention at a time and to discontinue it if there has not been a positive improvement.

However, it may be, that if a chemical intervention was used, the dose needs to be increased before an effective therapeutic level is reached.

These are decisions requiring input from the pain assessment team. Such decision-making is to be expedited as the resident is dependent on the knowledge and skills of this team to initiate interventions that will provide comfort and pain relief.

If a resident has been assessed at a pain level of 4 or more, on the 10-point scale, and there is an identified painful chronic or acute disease process, treatment must not be delayed.

### **Conclusion**

As with all assessments of the elderly patient/resident, caregivers need to take the time to listen and observe, to break down problems that seem unresolvable, and build on the patient’s family and social network.

Assessment, reassessment, communication, documentation, guidelines and practice standards are essential components for a successful pain management program. ■

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### **About the author**

Ann Brignell is a registered nurse with 21 years experience in palliative care. She was a member of the Palliative Care Research Team at St. Joseph’s Health Centre in Sarnia, Ontario, when this article, and the study it originated from, was written. This research team was headed by Dr. Linda Bowring, and also included Ann Baker and Debbie Kafford.

Ann retired from St. Joseph’s Health Centre in 1998. Currently, she is Palliative Care Pain & Symptom Management Consultant/Educator in the Sarnia-Lambton region for a program sponsored by the Ontario Ministry of Health and Long Term Care - Palliative Care Initiatives.

In 2000, Ms. Brignell edited the manual, “*Guidelines for Developing a Pain Management Program*.” As well, she was a member of the Registered Nurses Association of Ontario’s expert panel for developing the *Best Practices Guideline* for assessment and management of pain.

### **Note to readers:**

A complete package of assessment tools, including the Facial Grimace Scale and Behaviour Checklist can be down-loaded at:

([www.lambtoncounty.com/hospice](http://www.lambtoncounty.com/hospice)) Go to Pain & Symptom Management page and click “Guideline for Implementing a Pain Management Program.”

### **A good reason to forget where you placed the mobile phone**

A study from Sweden provides evidence that mobile phones damage key brain cells and could trigger the early onset of Alzheimer's disease.

Researchers found that radiation from mobile phone handsets damage areas of the brain associated with learning, memory and movement.

The study, carried out on rats, is the latest twist on the debate over whether mobile phones are a health risk.

Although the evidence is not conclusive, the study's author said that mobile phones could have the same effect on humans as on rats. "A rat's brain," he told a BBC News program in January, "is very much the same as a human's. We have good reason to believe that what happens in a rat's brain also happens in human's." ■

### **Activity boards provide ideal distraction**

To prevent residents with dementia from scratching and picking themselves or pulling on IV lines, make activity blankets or boards that can be placed on a resident's lap to give him/her something to do with the hands. The idea was developed by the nursing staff at a nursing home in Virginia, and reported in the *Journal of Emergency Medicine*.

Female residents are given lap blankets equipped with buttons, zippers, and hook and loop fasteners. A big hit with these residents are the pockets that button down and hold small plastic items.

The men are given activity boards that have chain locks, slide bolts, doorknobs, a horn, and other items on them. The edges of the board are sanded to prevent splinters. ■

### **Onset of AD delayed by intellectual pursuits**

Intellectual pursuits, or "mental gymnastics" that exercise the brain, are activities capable of warding off Alzheimer's disease. In fact, adults with hobbies that stimulate the brain are 2 1/2 times less likely to have Alzheimer's disease, says a report in the March, 2002 issue of the *Proceedings of the National Academy of Sciences*.

The study showed that people who regularly participated in hobbies that were intellectually challenging during their younger, adult years tended to be protected.

The study confirms other research showing that the onset of AD, although not prevented, is significantly delayed by education and by intellectually demanding professions.

In the study, those with Alzheimer's were shown to have been less active in all activities except watching TV, which is not considered a particularly protective pastime, and may even be a risk factor for the disease. ■

## **Head injuries linked to later dementia**

An analysis of head injuries among World War II veterans links serious head injury in early adulthood with Alzheimer's disease (AD) in later life. The study, by researchers at Duke University and the National Institute on Aging in the US, also suggests that the more severe the head injury, the greater the risk of developing AD.

The study, in a recent issue of the journal *Neurology*, did not demonstrate a direct cause-and-effect relation, but rather an association between the two.

The researchers began the study by looking at military medical records of male Navy and Marine World War II veterans who were hospitalized with a diagnosis of head injury or an unrelated condition. They used records instead of recall, thereby avoiding the problem of "recall error."

Over 500 veterans who had suffered a head injury, and 1,228 veterans without a history of head injury (the control group), participated in the study.

### **Dementia risk doubled**

The scientists then identified the aged veterans with dementia, and also determined whether the veterans had Alzheimer's disease specifically, or another type of dementia. They then compared the number of veterans with AD or other dementias in the group who had suffered a head injury to those in the group with no head injury.

The risk of AD and dementia was increased about two-fold among all those with moderate head injury, with risk increased four-fold with severe head injury.

Why head injury may be involved in AD and dementia is still unknown. The researchers also looked at genetic factors, but no significant interaction was found.

Other factors possibly influencing the development of dementia were also analysed, such as education, family history of dementia, and a history of alcohol or tobacco use; no associations could be found.

### **Alzheimer's - a chronic disease?**

The increased risk of dementia, some 50 years after the head injuries had occurred, is one more indication that AD is a chronic disease that unfolds over decades, the researchers pointed out. "Understanding how head injury and other AD risk factors begin their destructive work early in life may ultimately lead to finding ways to interrupt the disease process early on," they said. ■

The amyloid-beta peptide, so prominent in the brain plaques of people with Alzheimer's disease, and which most researchers hypothesize is the culprit in the neurodegeneration characteristic of AD, was first isolated from blood vessels in the brain almost 20 years ago. ■



# Strategies for the management of residents with personality disorders

A preamble to a major presentation on psychogeriatric care in the nursing home setting to be published in the April/May issue of *Canadian Nursing Home*

**Just as physical development can become impaired, personality traits can be dysfunctional. Caring for residents with dementia is challenging; caring for people with personality disorders can be “mind boggling.”**

**Today, “in the nursing home population . . . an estimated 11% to 23% of residents have a diagnosable personality disorder.” They are the residents nobody wants to care for!**

Zweig, R. and Hinrichsen, G., “Insight-oriented and supportive psychotherapy;” in *Psychiatric Care in the Nursing Home*; (Reichman, W. and Katz, P., Eds.); Oxford Univ. Press, NY, NY; 1996.

Residents with difficult personalities make treating their other medical conditions - even trivial ones - more complex. They tend to be emotionally disruptive and draining, and can sometimes induce intense anger or deep despair in their caregivers. They tend to have extreme difficulty in regulating their emotions, cognition, and behaviours. They experience an erratic and chaotic sense of self and a perception of others that cause them great pain. Their moods are often extreme and volatile, and they can go from sentimental affection to violent anger without a moments notice. (See page 77)

It is vital that nursing home caregivers meet frequently to share, debrief and agree on care approaches. Consistency is important. Staff need to remember that the person is not doing this on purpose, that they are only doing the best they can to survive.

## “Working through”

Care providers often experience emotional reactions to difficult residents. These reactions are indicative of negative counter-transference, such as anger toward the resident, defensiveness, wanting to control and dominate the

resident, excessive preoccupation with a specific resident, and becoming frustrated, confused, and unable to concentrate when interacting with residents.

Learning to **work through** this phenomena requires that the caregiver be able to tolerate and accept these feelings as natural reactions to personality disordered residents, and at the same time refrain from acting on them.

Discussing one’s emotional reactions to these residents with knowledgeable and trusted colleagues will increase the caregiver’s self-awareness and emotional control.

## “Counter-projection”

To dispute the resident with difficult personality traits merely reinforces and increases this resident’s use of **projection**, wherein he/she attributes his/her own feelings and experiences onto others. Additionally, personality disordered residents resort to excessive fault finding, criticism, and confrontation to reduce their own feelings of inadequacy. The caregiver must be prepared for this behaviour.

Instead of confronting the resident, the caregiver should acknowledge that his/her assertions are within the realm

of possibility, if not probability. Use empathy techniques to encourage the person to talk about real feelings or motives, even though they may be attributed to others rather to the self.

By using empathy rather than confrontation, trust is promoted, which eventually may lead to the resident revealing emotions and feared impulses.

## “Time-out”

Breaking off interactions or postponing the next interaction/confrontation is called “taking time-out.” This tactic can break the pattern of struggle with the resident, and it allows the caregiver time to become more self-aware and emotionally composed.

## “Limit setting”

Limit setting involves identifying the behaviour of the resident that needs to be controlled, and then offering an appropriate, alternate behaviour to the one the resident is demonstrating. It must be anticipated that this resident will test your mettle to determine if you will maintain your stance.

Recognize the personality disorder associated with the behaviour, but do not get hung up on a precise psychiatric interpretation. It is more beneficial to view these people as having particular and dysfunctional “personality traits” which become more prominent when they are experiencing stress. The greater the stress, the more aberrant and inflexible they become.

The best approach is to decrease the stressors being experienced. ■

(The preceding is an extended abstract for an article to be published in April, 2003, *Canadian Nursing Home*).

# Resident behaviour patterns common to all personality disorders\*

## 1. Mistrust

Many personality-disordered residents tend to mistrust others; thus, a straightforward, matter-of-fact approach is indicated, as opposed to an overly warm one. Punctuality, honesty, respect and genuineness can add significantly to the formation of trust.

In verbal interactions, avoid interpreting this resident's behaviour because mistrustful people tend to view interpretations as intrusive and controlling. Instead, use open-ended questions designed to assist the person to focus on their behaviour and its consequences. Maintain congruence between verbal and non-verbal behaviours. Incongruent behaviour by a caregiver often causes the resident to become more suspicious.

## 2. Splitting

The inability to evaluate and then synthesize and accept the imperfections of significant others, both past and present, results instead in dividing all individuals into "all good" or "all bad" categories. The person who is with them at this time tends to be labelled as the "good" staff member or "good" family member. Once out of sight, however, the next person becomes the "good," and whoever has just left is implied to be the "bad." They have distinct classifications and cannot comprehend anything or anyone in a "grey" zone. Once you have done something they dislike, you become a "bad." This can result in staff disagreement as to care plans, etc. This person firmly believes everything he/she says, even though they contradict themselves.

## 3. Primitive idealization

Magical powers are attributed to certain good staff or the resident physicians. When that person is away or sick, the person becomes so upset and insecure that they will call for reassurance that there is someone there to care for them. One resident, when she discovered her doctor was out of town, called the ambulance and took herself to the emergency department because she knew that there would be a doctor there if she needed help.

## 4. Projection

The attribution of one's own feelings and experiences onto others. Additionally, personality disordered residents will resort to excessive fault finding, criticism, and confrontation to reduce their own feelings of inadequacy.

## 5. Passive-aggression

The tendency to turn anger against the self in a provocative manner with the underlying motive of forcing others to comply with their wishes and needs. This tendency is behaviourally expressed through such acts as wrist cutting, non-lethal drug overdoses, and eating disorders like obesity, anorexia and bulimia nervosa.

## 6. Acting out

Inappropriate reactions to any situation, especially ones where they can deflect their feelings - which they are unable to express onto "taking it out" on others.

## 7. Narcissism

The tendency to perceive the self as all-powerful and important, and therefore entitled to criticize and belittle others. This individual often gives the impression of being vain and arrogant.

## 8. Dependency

The expression of incessant, unrealistic wishes, wants and needs, while at the same time, strenuously dependent. This resident has a great fear of abandonment, which probably occurred frequently in the past.

## 9. No-win relationship style

Since the individual feels that he/she is not a good person, and if you like them, then you must not be good.

## 10. Denial

When confronted, this resident will deny that the incident occurred, no matter how many witnesses to the contrary. It is not done consciously, but is a desperate attempt to decrease unpleasant feelings. If the issue is too painful, their only method of surviving is to carry on as if the incident did not happen. It is a subconscious reaction and they do not realize that they are denying.

\* Greene, J.A., *Adaptation and Growth: Psychiatric-Mental Health Nursing* (4th Ed.); Ch. 28 - Personality Disorders; Lippincott Publishing, New York, New York; 1997.