

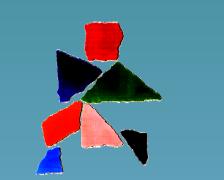
# **Ospedali Riuniti Di Bergamo**



# Integrated Psychosomatic therapy for patients suffering chronic pain

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#### Background: spinal column pain



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Approximately 80% of individuals will suffer from back pain with varying degrees of severity throughout their working life. (Nachemson 1983; Addel 1987; Frymoyer 1996)

Of the 80%, only 20% have been shown to have any pathological damage to the vertebral structure that can be objectively diagnosed (Bigos e Battle 1992) have already provided critical readings of this phenomenon.

Failure in the effectiveness of conventional techniques depends upon various factors: exaggerated significance attributed to structural diagnosis: excessive emphasis on bed rest: excessive emphasis on surgical intervention: and overall disregard of the significance of the patient's functional, postural and psychosomatic status. (Schnitzer et al 2004)

The clinician is confronted with an epistemological dilemma regarding the implication of pain, damage or trauma.

International research is advancing toward new multi disciplinary approaches that consider pain in the rachis, not only a nociceptive event with a structural basis, rather inclusive of a fluctuating psycho-physiological phenomenon in which beliefs, psychological stress and "sick behaviour" play a fundamental role (Weiser et al. 2006, Mombelli 2000, Affiatati et al. 2000, Andersson et al. 1989, Borman et al. 2003, McCracken et al. 2002, Masini M. 2001).

Neuropsychology clearly demonstrates that the brain organises sensory input actively recording the stimuli in unique subjective engrams. However study regarding the measurement of the motivational effects of pain, is still open.

Furthermore, in order to gain a more precise assessment regarding the efficacy of treatment on an algological scale, the "Quality of Life" (QoI) is now considered to be a significant and relevant issue of reference.

The subject of QoI has now expanded to include not only physical health, but also psychological well being, thus emphasizing the subjective nature of response.



Fig. 1: Scales of applied assessments

## The role of Psychotherapy

How can the psychotherapist address pain that has not responded to psychotherapeutic dialogic intervention?

How can the psychotherapist utilise manual therapy for the treatment of pain?

Adopting a holistic approach to the treatment of chronic pain, we trialed a combined approach of brief psychotherapeutic counseling with body work. The trial was conducted within a hospital setting that necessitated conforming to the economic and managerial resources available, typical of hospitals of the public sector. The goal was to use the relationship between pain and Quality of Life as a reference point for developing a context from which generative questions could lead to the development of appropriate treatment. Ultimately a combined somatic procedural - dialogic model was developed.

#### he choice of an unconventional technique

Unconventional manual techniques can be applied simultaneously and seamlessly with a dialogical modality.

The Neurostructural Integration Technique® (NST) - developed by Michael Nixon-Livy from Australia, has demonstrated consistent efficacy at the Istituto di Psicosomatica Integrata in Milan, Italy.

NST consists of sequences of precise rolling movements called PRI-MOVES (proprioreptive rolling impulse movements) applied to selected soft tissues (muscles, tendons, ligaments and nerves) in the lumbar, thoracic and cervical regions of the body and upper and lower extremities.

Resultant responses in muscle tone are confirmed by palpation to muscle tissue, objective measurements and patient feedback.

#### Aims of the research and construction of the setting

To assess the efficacy of an integrated therapeutic setting within hospital facilities via the measurement of objective and subjective parameters.

The research project was conducted collaboratively between the Istituto di Psicosomatica Integrata (IPSI), the Faculty of Psychology of Università degli Studi Milano-Bicocca and the Departments of Neuroscience of the Associated Hospitals of Bergamo, endorsed by the Hospital's Committee of Bioethics and promoted by the Lombardy's Regional Councillorship for Health, and within the OMS experimental program on unconventional techniques in Italy.

The outpatient clinic was based at the Departments of Neuroscience of the Associated Hospitals of Bergamo.

#### Materials and methods

Following a previous pilot study of 60 patients from IPSI, published in 2004 by the University of Milan, 39 additional patients were recruited between 2004 and 2006 (of whom 36 completed the study). Each participant received five **NST** sessions.

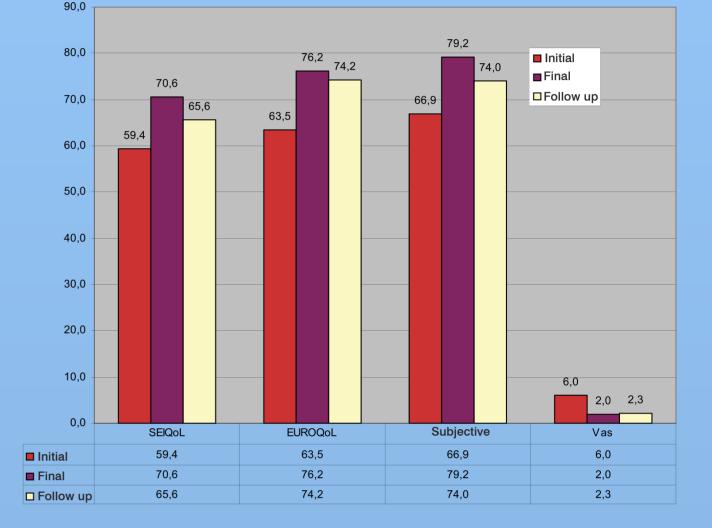
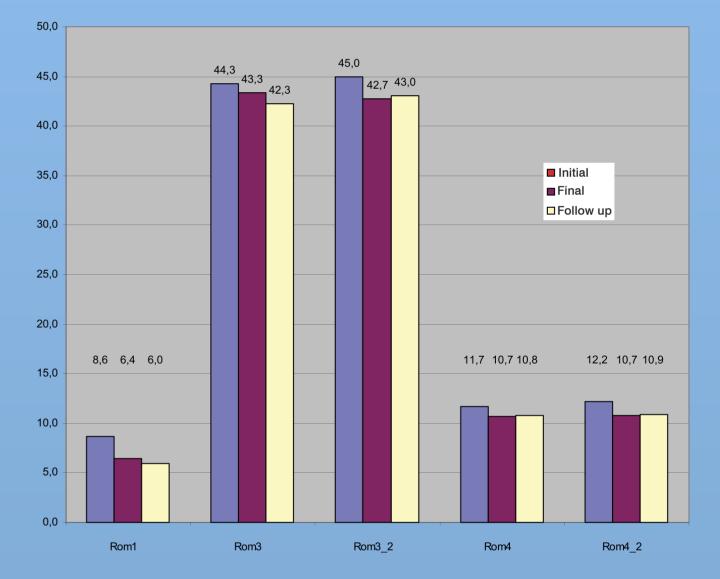


Fig. 2: The Range of Movement trend



<sup>(</sup>ROM1 = front bending, ROM3 = side bending, ROM4 = rotation of the neck, -2 = left)

Each assessment was comprised of an interview, postural evaluation (including the Range of Motion -ROM), assessment of pain intensity using VAS scale and an assessment of the quality of life based on three scales: SEIQoL, EUROQoL, VAS of Health.

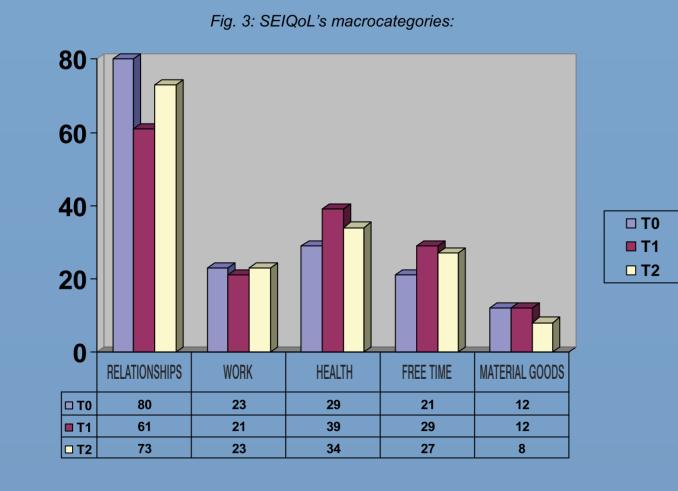
The SEIQoL is a subjective scale based on the subject's self-assessment of QoL using five life aspects, determined and chosen by the subject. All tests were applied at the end of therapy and subsequently three months later.

A committee of judges assessed the evolution of all life aspects chosen by the subjects and grouped them in macro-categories. Additional parameters used for their objective value were: taking pain-relievers before and after treatment, measurement of somatic flexibility and utilisation of numerical values from the QoL scales.

#### **Quantitative results of the observational study**

Analysis of the results focused on both objective and subjective assessments. 81% of patients had taken no medication between treatments. Comparative assessment of results between treatments confirmed that all the assessment values had improved.

In particular results pertaining to VAS, self-perception and Quality of Life confirmed significant statistical improvement. A linear correlation exists between VAS and EUROQoL



### Analysis of the qualitative data

Qualitative analysis of the life aspects on the SEIQoL indicated a positive increase in the categories included in "Health and Care for Yourself" in contrast to an analysis of categories concerning relationship to the outside world.

Analysis of positive or negative values for each item in the macro-categories indicates that the increase of the absolute value in "Health and Care for Yourself" throughout treatment is attributable to an increase in positive values. This vindicates the efficacy of utlising the integrated setting approach.

The macro-category "Free time" included holiday, sport, volunteering, cinema/theatre and general recreational activities. It was clear that after an improvement in health, subjects spent more time pursuing these activities.

The macro-category "Relationships" (SEIQoI scale) included relationships with partner, family and friends. The fact that the T1 figure is lower than T0 may be a consequence of greater attention attached to oneself in relation to improvements in health, thereby decreasing the importance attached to the relationship with others.

The importance attached to relationships between the end of the treatment and the three month follow-up would indicate, on the contrary, that increased openness to others is a consequence of improvement in health.

# Conclusions



The specialised psychological dialogue used throughout the course of treatment initiated a process self reflection that further initiated a process of enhanced subjective inquiry and analysis.

If on the one hand the criteria of evidence based medicine are satisfied by statistical data relating to a decrease in pain levels then just as certainly are the criteria for qualitative improvements satisfied and made valid by subjective evaluation on a QoL scale such as that used in the category 'Care for Oneself '

Significantly this was not apparent in the category relating to relationship with the outside world.

It can be further concluded that the choice of using an unconventional technique such as NST in a therapeutic setting where the usage of therapeutic dialogue was a natural and seamless part of the process, enhanced the patients perception of anticipated wellbeing and wellbeing itself not merely as a somatic event rather as a multidimensional event in which



#### Furthermore in a dyadic sense, when therapeutic dialogue is used in a context where listening is enhanced by the very setting in which the dialogue is delivered, it is highly probable that nociceptive reduction will be further enhanced when at the same time the implementation of a proven manual therapy is used.

The implication is that sustainable clinical outcomes are enhanced due to a reparative imprint having been established at the psychosomatic level.

The results encourage further research on the efficacy of this particular type of therapeutic setting both in hospitals and elsewhere.

