An Example of Formulation

Case

A 48-year old married Hispanic female, currently unemployed, was admitted to the medical service for exacerbation of irritable bowel syndrome. A psychiatric consultation was requested because she was observed crying, and stating that life was not worth living.

Formulation

Childhood/Early Adulthood

She has by family history genetic predisposition for depression on her mother's side. Further, her hepatitis C associated with early intravenous drug abuse is a consideration in using drugs that are metabolized by the liver.

For a patient with her genetic vulnerability to heightened stress response, her early environment of migrant farmers was filled with role models of drug and alcohol abuse and domestic violence. Her stepfather was clearly such an example, who also physically abused the patient as a child.

This early childhood abuse caused an epigenetic cascade resulting in stress-responsive IBS as well as depressive neurosis, which led to polysubstance abuse as self-treatment for the symptoms, again an endemic meme, which unfortunately led to increased symptoms in the long run.

Adulthood

The patient made surprisingly good adaptation by first divorcing her abusive first husband, then finishing her education as a cosmetologist, and working productively as a cosmetologist. She also married a caring man and had two children.

One wonders whether there may have been an unidentified beneficial identification figure for the patient during this period. Reconnecting with this role model may be an important factor in planning therapy.

Recent Stresses

The tragic loss of her older daughter due to a motor vehicle accident, however, was a major stress, overwhelming her defenses, and awakening dormant memories of childhood stress, resulting in an unchecked replication of hopeless and helpless memes, traumatic memories of physical and sexual abuse, finally culminating in a **depressive syndrome** as

well as a severe exacerbation of **IBS**. Ideas associated with menopause, such as the loss of reproductive function, may have contributed to the strengthening of her low selfesteem, and the physiologic concomitants of menopause such as hot flashes may have contributed to her lability of affect (crying).

Formulating Treatment

1. Depressive Syndrome, Depressive Neurosis:

a. Psychopharmacology (Gene oriented Rx)

In view of her hepatitis C, drugs that are metabolized by the liver must be used with caution. As she has severe insomnia, and her anorexia associated with her IBS and depression, an antidepressant that induces sleep and increases appetite would be ideal.

Mirtazapine is a non-SSRI drug that has both serotonergic and noradrenergic action, induces sleep, and enhances appetite. It is metabolized by both CYP 450 2D6 as well as CYP 450 3A4. While mirtazapine is metabolized by the liver, her normal liver enzyme levels indicate that use of this drug is not contraindicated. Thus, mirtazapine 15 mg hs was recommended.

b. Psychotherapy and Hospitalization (Meme oriented Rx):

The patient had overwhelming proliferation of depressive ideas (memes) that had to be controlled. **Hospitalization** was recommended as a broad-spectrum meme-oriented therapy, to change the source of incoming memes in a controlled setting, and to provide augmentation of meme-filtering activity.

Hospitalization also provides such diversionary activities as occupational and recreational therapy.

After the hospitalization, the patient should receive outpatient therapy which would include **stress management** techniques which would be conducive to both depressive syndrome and depressive neurosis, as well as the stress-responsive gastroenteritis. She should also receive **education concerning menopause**. **Cognitive-behavioral therapy geared to building self-esteem** would be effective as well as **interpersonal therapy directed to resolving the grief** over her daughter's death.

2. Substance abuse :

• Substance use, early introduced as a meme from her father, was an attempt to manage and **self-treat depression** resulted in her hepatitis C.

Providing **alternative methods of** deriving pleasure, such as relaxation training, music, dance, massage therapy, may be helpful.

Epilogue: Role Model

I wondered in the formulation whether the patient had an unidentified role model during the period when she divorced her first husband and went back to school to become a cosmetologist. In fact, it turned out that the patient had made friends with an older woman, who was herself a cosmetologist. When she moved to another city, the patient had gradually lost contact with this woman.

When the patient was reminded of that relationship, she successfully reconnected with her and has weekly phone conversations with her. The patient considers talking with this older woman regularly to be a great part of her current psychotherapy.