

# **Neuroleptic Awareness**

## **Part 4**

### **Adverse Psychological Effects of Neuroleptics**

**Neuroleptic/Antipsychotic medications disrupt the functions of Dopamine, Noradrenaline and Serotonin neurotransmitters, all of which are involved with psychological and cognitive functions.**

**Neuroleptic dysregulation of these neurotransmitters interferes with memory, learning, concentration, behaviour and our ability to assimilate new experiences within psychotherapy.**

# Dopamine Neurotransmitter

## **Psychological Functions:**

Motivation, pleasure in association with love, addiction, attachment, altruism (unselfish concern for others) and desire.

## **Cognitive Functions:**

Focusing and concentrating skills

## **Dopamine Depletion caused by Neuroleptics:**

Results in lack of pleasure and ability to feel love, lack of remorse about actions and inability to focus.

# Noradrenaline (Norepinephrine) Neurotransmitter

Noradrenaline was discovered in 1946 and besides being a major neurotransmitter in the Central Nervous System is also a hormone when released by the adrenal gland.

## **Psychological Functions:**

Concerned with levels of arousal, maintenance of attention and emotions... Human studies have shown high concentrations of norepinephrine lead to feelings of elation and euphoria (extreme happiness) while low levels of norepinephrine have been linked to feelings of depression (unhappiness)

Source : Franken, (1994). <http://www.csun.edu/~vcpsy00h/students/happy.htm>

## **Cognitive Functions:**

Forming memories and learning...

Emotional arousal leads to activation of the locus coeruleus with the subsequent release of norepineprine in the brain, resulting in the enhancement of memory.

Source: Tully K and Bolshakov VY (2010) <http://www.biomedcentral.com/1756-6606/3/15>

## Noradrenaline Disruption

### Noradrenaline and Neuroleptics:

“Stimulation of post-synaptic noradrenergic receptors...has consistently improved human performance on tests of memory. Thus blockade of these same receptors by antipsychotics (*neuroleptics*) suggests... medications may facilitate cognitive decline”

Source: Jackson Grace E. *Rethinking Psychiatric Drugs: A Guide for Informed Consent*.  
Bloomington, IN: Author House, 2005.

# Serotonin Neurotransmitter

## **Psychological Functions:**

Emotions, regulation of mood and our subjective perception in relation to the world and other people.

## **Cognitive Functions:**

Learning and memory, the regulation of mood and appetite.

## **Serotonin and Neuroleptics:**

There are 14 different types of serotonin receptors that may be targeted by neuroleptics with risperidone, clozapine, olanzapine, quetiapine and clopixon especially affecting the serotonin 5-HT<sub>2</sub> receptor.

Source: Jackson Grace E. *Rethinking Psychiatric Drugs: A Guide for Informed Consent*.  
Bloomington, IN: Author House, 2005.

Serotonin levels can be raised because of certain drug combinations, leading to potentially fatal ***Serotonin Syndrome***.

# Serotonin Disruption

**The complexity of the serotonin system has demonstrated variable effects upon cognitive functioning.** Source: Jackson (2005)

## **Neuroleptics both Raise and Deplete Serotonin Levels:**

These effects are time dependent and can result in a transient depletion of serotonin (5HT). R.P. Croll et al. (1997).

## **Psychological and Cognitive Effects of **decreased** Serotonin:**

Nervousness/anxiety, worry, negativity/pessimism, irritability, impatience, aggression, feeling edgy, self destructive, low self esteem/confidence, circular thinking patterns, fears and phobias, masochistic or suicidal thoughts/plans.

**Psychological and Cognitive Effects of **increased** Serotonin:** hypomania, hallucinations, agitation, mental confusion, headache and coma.

# PSYCHOLOGICAL SIDE EFFECTS OF NEUROLEPTICS

## Neuroleptic Induced Deficit Syndrome (NIDS)

A comparison of the “negative symptoms of schizophrenia” and the adverse effects of the neuroleptic medications show them to be very similar.

<b>Neuroleptic Side-Effect</b>	<b>“Schizophrenia” Negative Symptom</b>
Drowsiness	Attentional Impairment
Apathy and Lack of energy	Apathy and Lack of purpose
Flat affect	Affective blunting and restrictive affect
Lack of feeling, feeling ‘dead inside’	Reduced emotional range
Reduced drive and initiative	Reduced sociality and curiosity
Dysphoria	

Source: Lewander (1994)



# **PSYCHOLOGICAL SIDE EFFECTS OF NEUROLEPTICS**

## **Neuroleptic Induced Deficit Syndrome (NIDS)**

Since the cognitive and psychological functions of dopamine, noradrenaline and serotonin are disrupted by neuroleptics, the similarity becomes self-explanatory. The projection of the negative symptoms to “schizophrenia” needs to be attributed to neuroleptic adverse effects.

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Anosognosia

- Similar to being intoxicated with alcohol, emotional disinhibition.
- Being unaware anything is amiss with personal behaviour
- To observers it is quite obvious that personal evaluation of behaviour is impaired. Breggin (2006)

## Dementia

- Dementia is associated with Tardive Dyskinesia (TD).
- Research by Thomas and McGuire, (1986) showed that subjects with high TD scores had memory impairment.
- In America, there are litigations relating to patients who have been seriously affected by TD and the associated intellectual impairments.

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Dysphoria

- Extremely unpleasant and distressing subjective change in mood.
- Severe anxiety, agitation, depression and irritability.
- Impairs psychological therapy. Marder (2005)

## Akathisia

- Perpetual inner emotional torment and restlessness.
- Inability of the patient to keep still.
- Associated with anxiety and suicide. Nelson (2001)

See also: <http://jannel.se/suicide.psychiatricdrugs.pdf>

**47% of mental health patients experience akathisia, dysphoria and emotional flattening.**

Windgassen (1991)

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Violence

- High doses of neuroleptic medication present increased patient violence. Barnes & Bridges (1998), Herrera et al. (1998).
- The chemical interferes with the patient's rationality, inducing:
  - Hostility, verbal and physical aggression.
  - Increasing the neuroleptic dose accentuates aggression, patient distress is thus heightened.
- The build up of **Acetylcholine** either with long term neuroleptic use or patients' hyper-sensitivity to neuroleptics due to their genetic slower rate of drug metabolism contributes to violent behaviour.

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Depression

- Severe depression occurs in patients on depot neuroleptic medication. De Alarcon and Carney (1969).

## Suicide

- Suicide rates are up to 50% higher in neuroleptically treated patients. Markowe et al. (1967).
- Intolerable feelings of akathisia together with the distressing mood changes of dysphoria could cause suicidal ideation. Thomas (1997)
- 60% of completed suicides were taking psychotropic drugs.

See: Sweden Trans World News (2007)

<http://jannel.se/psychiatricdrugs.suicide.pdf>

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Super Sensitivity Psychosis (SSP)

- When a neuroleptic blocks **dopamine** receptors, the brain responds by increasing the number of dopamine receptors by 30% to compensate.
- The extra **dopamine** receptors are hypersensitive to minute traces of dopamine remaining in the synapses and the patient eventually experiences a psychosis.

This neuroleptic physiological process and outcome is called:

## **SUPER SENSITIVITY PSYCHOSIS (SSP)**

Super Sensitivity Psychosis has been well documented by researchers.

Chouinard, G., & Jones, B. D. (1980)

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Super Sensitivity Psychosis cont...

58% of patients 'relapse' on neuroleptic medication, because of **SSP**.

Crow et al (1986), Moncrieff J (2006) and Samaha et al (2007)

Read: Moncrieff J. (2006) “Does antipsychotic withdrawal provoke psychosis? Review of the literature on rapid onset psychosis (**supersensitivity psychosis**) and withdrawal-related relapse.”

<http://psychrights.org/research/Digest/NLPs/actadrugwith.pdf>

Each stepping up of neuroleptic dose results in the same physiological process and psychological outcome i.e. hallucinations and/or delusions.

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Super Sensitivity Psychosis cont...

When patients experience **SUPER SENSITIVITY PSYCHOSIS**, the usual psychiatric treatment is to increase the antipsychotic dose, or prescribe an additional neuroleptic. Or both.

When patients experience a combination of antipsychotic adverse reactions and a non-therapeutic outcome, this is indicative of **NEUROLEPTIC HYPERSENSITIVITY**, which is a genetic inability to metabolise antipsychotics efficiently. The management is to repeat the above practice.

In both **NEUROLEPTIC HYPERSENSITIVITY** and **SUPER SENSITIVITY PSYCHOSIS** the usual psychiatric treatments result in psychological deterioration.



## ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

- The medical model attributes both **NEUROLEPTIC HYPERSENSITIVITY** and **SUPER SENSITIVITY PSYCHOSIS** to patients being ‘treatment resistant’.
- When a greater awareness of neuroleptic physiological processes and knowledge of pharmacogenetics is incorporated into training at British Medical Schools and psychiatrists’ on-going Continuing Professional Development, the necessity for dose reduction - as opposed to polypharmacy and dose increase - might be perceived.

*“Treatment,” with antipsychotics for many patients induces psychosis.*

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Tardive Psychosis, Withdrawal, Rebound Psychosis and Dependency

The medical model views patients who withdraw from psychotropic drugs and become psychotic, as experiencing a 'relapse'. The 'relapse' is perceived as the worsening of "schizophrenia" and seen as proof the "schizophrenic" patient needs antipsychotic drugs.

The physiological mechanism in psychotropic drug withdrawal:

*Brain nerve ending receptors are unable to adapt quickly enough to the reduction of toxic chemicals in the synapse, in order to prevent a tardive/rebound psychosis.*

# ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS

## Tardive Psychosis, Withdrawal, Rebound Psychosis and Dependency

In the 1950's neuroleptics were classified as *major* tranquillisers and the currently known benzodiazepines were classified as *minor* tranquillisers

Although it is now accepted *minor* tranquillisers cause dependency, pharmacists and key opinion leaders refute that *major* tranquillisers cause dependency.

# **ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS**

## **Tardive Psychosis, Withdrawal, Rebound Psychosis and Dependency**

60%-80% of patients on depot injections 'relapse' if the medication is discontinued.

Johnson (1979).

### **Relapse versus withdrawal in drugs used to treat psychosis:**

“...data point strongly to the existence of discontinuation syndromes after cessation of treatment with neuroleptics which may involve features other than motor dyskinesias.”

Tranter & Healy (1998)

**Why is it so difficult to stop psychiatric drug treatment? It may be nothing to do with the original problem.**

**Moncrieff (2006)**

# **ADVERSE PSYCHOLOGICAL EFFECTS OF NEUROLEPTICS**

## **Neuroleptic effects on Smoking**

Many people who take neuroleptic drugs smoke. This may be because nicotine is a monoamine oxidase inhibitor. i.e. Nicotine delays the breakdown of dopamine in the brain, therefore the dopamine blocking effect is temporarily countered, enabling a moments clarity of thought and respite from the drugs unpleasant brain fogging effect, the Neuroleptic Induced Deficit Syndrome.

## CONCLUSION

Patients in the Acute Psychosis Integrated Approach, *who were not exposed to neuroleptics*, spent fewer days in hospital and experienced less psychosis than the control group treated with neuroleptics.

80% of patients in the 18<sup>th</sup> Century Moral Treatment Movement were fully functioning in the community after one year and *were not exposed to neuroleptics*.

When 60% of patients who are currently exposed to neuroleptics are frequently admitted to psychiatric units, there is a need to question neuroleptic impact on patients' continuing psychological ill health from repeated psychoses.

**“Professionals also have a duty to provide good, clear and honest information regarding schizophrenia, and about the treatments and services available.”**

**NICE Guideline.2.1.4**



**The National Institute for Health and Clinical Excellence (NICE)** Guidelines provide ‘evidenced based’ medication treatments sourced from pharmaceutical industries. Professionals use these recommendations to inform patients about ‘good, clear and honest’ information for treatments on ‘schizophrenia’ as suggested by **NICE**.

However the industry has an alleged reputation for unethical strategies such as ghost writing, poorly designed trials and suppression of negative clinical trial findings, resulting in outcomes that highlight the benefits of medications. The withholding of unknown risks of medications, i.e. adverse psychological effects does not provide **NICE** an honest, or good or clear source of neuroleptic ‘evidenced based’ medicine for ‘schizophrenia’ guidelines.

This situation has a rebound effect on professionals, as they do not receive entire medication transparency and are therefore unable to inform patients about the hidden unknown risks i.e. neuroleptic adverse psychological effects.

**NICE** places its misguided trust heavily onto industry sources as opposed to external sources that do provide clear and good information; these sources have no conflict of interests and therefore the information is transparent and honest. These sources which inform about the psychological and cognitive functions of neurotransmitters, hidden risks of neuroleptic adverse psychological effects and neuroleptic physiological mechanisms, do not filter through to professionals and patients.

Professional adherence or compliance with **NICE** is expected by local policies and failure to comply with Guidelines may result in job suspension.

Professionals who may have a greater awareness of neuroleptic adverse psychological effects and the physiological process compared with **NICE** Guidelines, and wish to have an honest relationship with patients, are in a situation, in which they are **theoretically being held to psychological and professional ransom.**

## **BEWARE !**

**NEVER** stop taking a psychotropic drug suddenly. The withdrawal effects can be horrendous!

They are not symptoms of some spurious “disease” returning or worsening as most doctors and nurses will tell you.

For good advice see “COMING OFF.COM” <http://www.comingoff.com/>

The ICARUS PROJECT. “Harm Reduction Guide To Coming Off Psychiatric Drugs & Withdrawal”

<http://theicarusproject.net/downloads/ComingOffPsychDrugsHarmReductGuide1Edonline.pdf>

MIND “Making sense of coming off psychiatric drugs”

[http://www.mind.org.uk/help/medical\\_and\\_alternative\\_care/making\\_sense\\_of\\_coming\\_off\\_psychiatric\\_drugs](http://www.mind.org.uk/help/medical_and_alternative_care/making_sense_of_coming_off_psychiatric_drugs)

## **Useful websites for further information:**

**Law Project for Psychiatric Rights:**

**<http://psychrights.org/index.htm>**

**AHRP Alliance for Human Research Protection**

**[www.ahrp.org](http://www.ahrp.org)**

**Asylum Magazine for Democratic Psychiatry, Psychology; Radical Approaches  
around Mental Health**

**<http://www.asylumonline.net/>**

**The Center for the Study of Empathic Therapy, Education and Living.**

**<http://www.empathictherapy.org/>**

**Furious Seasons**

**<http://www.furiouseasons.com/about.html>**

**Safe Harbour**

**[www.alternativementalhealth.com](http://www.alternativementalhealth.com)**

**MindFreedom International: 26 Years of Human Rights Activism in Mental Health <http://www.mindfreedom.org/>**

**A critical bibliography of the Biopsychiatric Model. Loren.R.Mosher MD  
<http://www.moshersoteria.com/articles/biopsychiatric-model/>**

**Psychiatric Drug Facts with Dr. Peter Breggin  
<http://www.breggin.com/>**

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