

DISERTASI

REGULASI PSIKO-NEUROENDOKRIN PADA OPIOID ADDICT RECOVERY DENGAN PROGRAM SPIRITUAL THERAPEUTIC COMMUNITY (STC)

**(Eksperimen pada Residen di Balai Kasih Sayang Pamardi Siwi
Badan Narkotika Nasional Jakarta)**



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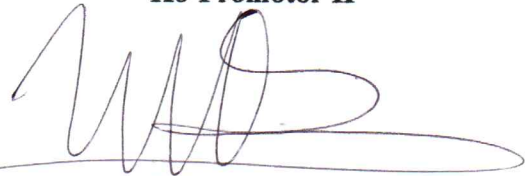
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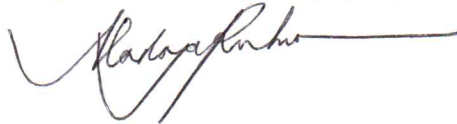
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ABSTRACT

PSYCHO-NEUROENDOCRINE REGULATION WITHIN OPIOID ADDICT RECOVERED BY SPIRITUAL THERAPEUTIC COMMUNITY (STC) PROGRAMME

(An experiment to recidences in Balai Kasih Sayang Pamardi Siwi
National Narcotics Board Jakarta)

Drug abuse is a complicated problem in one's life. It has many negative effects for a user, his or her family and social environment. Therefore, these may threat a national development. The purpose of this study has been to explain the psycho-neuroendocrine within addict recovered by spiritual therapeutic community programme. It had been carried out in Pamardi Siwi Badan Narkotika Nasional, Jakarta from September to December 2004.

It used psychobiological paradigm of Quasi-Experimental. The sample of the study consisted of 22 addict recoveries with randomized control pretest-posttest design. Spiritual therapeutic community played role as an independent variable, whereas its dependent variables were religiousness, craving, cortisol, and HVA. Control variables were personality, Hb, erythrocyte, leucocyte, SGOT, and SGPT. Religiousness and craving were measured by using questionnaires (SDR and DSEQ), cortisol was measured by RIA, and HVA was measured by HPLC. The data of the study were analyzed by using hotteling t, pair t test, and regression test.

Hotteling t test has shown that there were multivariate differences in the degree of religiousness, craving, cortisol, and HVA (Wilks' Lambda $p = 0.002 < 0.05$) between before and after treatment. It also has been found by using pair t test that there were univariate differences about religiousness, craving, cortisol, and HVA between before and after treatment in the treatment group. In contrast, there was no different in the control group. Regression test has shown that religiousness influenced cortisol, HVA, and craving. Similarly, cortisol and HVA influenced craving.

This study concluded that there has been a significance difference about religiousness, craving, cortisol, and HVA variables in the opioid addict recoveries before and after experiencing STC treatment. Religiousness influenced cortisol, HVA, and craving. Similarly, cortisol and HVA influenced craving. It is, therefore, recommended that other research about opioid addict recovery should be carried out within a longer period, including reentry and after-care stages, and greater number and balance of the sample. In addition, it should include variables related to broader psycho-neuro-immuno such as neurotransmitters and interleukins.

Key words: Psycho-neuroendocrine, opioid, spiritual therapeutic community

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DAFTAR SINGKATAN

| | |
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| ACTH | : <i>Adrenocorticotropic hormone</i> |
| ALT | : <i>Alanine amino transferase</i> |
| AST | : <i>Aspartate amino transferase</i> |
| ATP | : <i>Adenosine triphosphate</i> |
| BKSPS | : <i>Balai Kasih Sayang Pamardi Siwi</i> |
| BNN | : <i>Badan Narkotika Nasional</i> |
| c-AMP | : <i>3,5- Cyclic adenosine mono phosphate</i> |
| COD | : <i>Coordinator of departement</i> |
| COMT | : <i>Catecol-o-methyltransferase</i> |
| CRF | : <i>Corticotropin- releasing hormone</i> |
| DBH | : <i>Dopamine β-hydroxylase</i> |
| DNA | : <i>Deoxyribonucleic acid</i> |
| DOPAC | : <i>3,4 Dihydroxyphenyl acetic acid</i> |
| DSEQ | : <i>Drug self- efficacy questionare</i> |
| FSG | : <i>Family support group</i> |
| GABA | : <i>Gamma-amino butyric acid</i> |
| GAS | : <i>General adaptation syndrome</i> |
| GDP | : <i>Guanosine diphosphate</i> |
| GREs | : <i>Glucocorticoid response element</i> |
| GTP | : <i>Guanosine triphosphate</i> |
| HOD | : <i>Head of departement</i> |
| HPA-axis | : <i>Hypothalamo- pituitary- adrenal-axis</i> |
| HPLC | : <i>High performance liquid chromatography</i> |

| | |
|-----------------------|--|
| 5-HT | : <i>5-Hydroxytryptamine</i> |
| 5-HIAA | : <i>5-Hydroxy indole acetic acid</i> |
| HVA | : <i>Homovanilic acid</i> |
| Lc | : <i>Locus coeruleus</i> |
| LSD | : <i>Lyseric acid diethylamine</i> |
| MAO | : <i>Monoamine oxydase</i> |
| MDMA | : <i>Methylene dioxy methamphetamine</i> |
| MMPI | : <i>Minesota multiphasic personality inventory</i> |
| NA | : <i>Noradrenalin</i> |
| NAc | : <i>Nucleus accumbens</i> |
| NAPZA | : Narkotika, psikotropika dan zat adiktif lainnya |
| NIDA | : <i>National institute on drug abuse</i> |
| NSB | : <i>Non specific binding</i> |
| PAG | : <i>Periaqueductal gray matter</i> |
| PFC | : <i>Prefrontal cortex</i> |
| PKA | : Protein kinase A |
| PNMT | : <i>Phenylethanolamine N -methyl transferase</i> |
| POMC | : <i>Pro-opiomelanocortin</i> |
| PPDGJ | : Pedoman Penggolongan Diagnosis Gangguan Jiwa |
| PPKKB | : Panitia Pengembangan Ilmu Kedokteran Berkelanjutan |
| PVN | : <i>Paraventricular nucleus</i> |
| DD₁ | : Reseptor dopamin 1 |
| Gl₁ | : Reseptor glutamat 1 |
| RIA | : <i>Radioimmunoassay</i> |
| OP_μ | : Reseptor opioid μ |

- RSKO** : Rumah Sakit Ketergantungan Obat
- SDR** : *Sindrome deficiency reward*
- SDR** : Skala dimensi religi
- SGOT** : *Serum glutamic oxaloacetic transaminase*
- SGPT** : *Serum glutamic pyruvic transaminase*
- SRO** : Sistem reward otak
- SSDA** : Sistem saraf dopaminergik
- SSEQ** : *Smoking self- efficacy questionare*
- SSGlu** : Sistem saraf glutamatergik
- SSP** : Sistem saraf pusat
- STC** : *Spiritual therapeutic community*
- STP** : *Serenity tranquility peace*
- TC** : *Therapeutic community*
- THC** : *Tetrahydro cannabiol*
- Tyr-OH** : *Tyrosine-hydroxide*
- TMD** : *Trans membrane domain*
- UNDCP** : *United Nations Drugs Control Programme*
- VTA** : *Ventral tegmental area*