

Patients with Amphetamine Dependence in Hawaii and Kyushu

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Introduction

■ The Gap

- Different Epidemiology, Health Care system, Culture, Crime, Law / Same Treatment, 12 Steps, Addict
- Sparse knowledge about the real patients' experience / Existing Beliefs, Knowledge about the statistics of Criminal records

■ Objective

- To examine differences of patients with addiction in two areas.

Crime

	Homicide			Drug offenses	
	Incidence	Rate	Rate of arrest	Incidence	Rate
Japan	1,323	1.0	95.3%	29,960	23.9
U.S.A.	18,209	6.8	66.1%	1,580,000	591.0

- The incidence of homicide, the rate of arrest of the suspect, The incidence of drug offences and its rate per 100,000 capita. 1997 Rate is the incidence per 100,000 capita

Illicit drugs in general population

	Choice of Drug (%)				
	Inhalants	Stimulants	Marijuana	Cocaine	Heroin
Life time experience	1.44	0.30	0.43	0.08	0.03
Used in the past 12 months	0.08	0.05	0.05	0.05	0
Used more than 12 months ago	1.37	0.25	0.38	0.03	0.03
None	96.58	97.42	97.80	98.12	98.35
No answer	1.98	2.28	1.77	1.80	1.62

Comparison of Education

	High School Enrolment %		Completed 4 years of College or More %	
	Total	Female	Male	Female
Japan	97.0	97.7	47.5	31.5
US	90.0	90.1	26.5	22.4

Health Care Resources

	Physicians per 100,000 people	Hospital beds per 100,000 people (Psychiatry only)	Average length of stay for one admission days (Psychiatry only)	Outpatient visits per capita, year
Jpn	180	1620 (264)	44 (322.5)	16
US	260	400 (63)	8 (12.7)	6

Basic Questions

- Apparent differences
 - Drug of choice, Price
 - Legal system, health care provision, and culture
- Is Japanese patients are different from USA patients?
- Does the same treatment will work for both?

Hypothesis

1. Choice of drug among the patients is different
2. Early parental loss; American might have higher rate of parental loss.
3. Education, Japanese might have higher rate of finishing high school.
4. Reason of the treatment, Japanese might have higher family involvement and higher referral from other health care agencies, whereas American might have higher legal involvement.
5. Choice of job is different
6. Social welfare, Health care cost coverage; Japanese might have higher public funding for covering the health care cost.
7. Psychopathology; Substance use disorders have high rate of comorbid conditions. We hypothesized the pattern of comorbid diagnosis would be different.

Subjects

- Patients who sought treatment for drug-related disorders in Hawaii and Kyushu, Japan
- The Kyushu samples were recruited in Hizen National Mental Hospital 60 patients cooperated
- The Hawaii samples were recruited in Hina Mauka Treatment center for substance use disorder, in Kaneohe, Hawaii.

HNMMH / Hina Mauka

- Hizen National Mental Hospital
 - 14 wards, 620 psychiatric beds, outpatient clinic, and day care and night care services. One ward is dedicated for the inpatient treatment of substance abuse. Its treatment program integrates detoxification, rehabilitation, management of comorbid psychiatric illnesses, outpatient program, family program and general medical treatments.
- Hina Mauka
 - non-profit organization that offers community-based residential to outpatient treatment for substance use disorders, except acute detoxification. Hina Mauka's residential, day treatment, outpatient, and adolescent outpatient programs have been accredited by CARF, the rehabilitation accreditation commission.
- Both treatment programs have Intramural NA meetings, and attendances to the community meetings are strongly encouraged. Treatments aim at abstinence from any addictive substance.

Method

- Semi-structured interview was developed for this study
 - General information
 - Psychopathology
 - Self-report questionnaire; DAST as one of the severity measure.
 - Social background;
- Interviewer
 - Psychiatrists. Kyushu samples were interviewed by one of the author (M. M.) and staff psychiatrists under M.M.'s supervision in 1998 to 1999. Hawaii samples were interviewed by the first author (H.H.) in January to February 2000.
- The study was approved at the institutional review board in both sites. All of the subjects were informed about the study procedures and protection of the individual information. Only the subjects consented to the study procedure with a written form participated.

Substance use disorder diagnosis

	Alcohol	Amphetamine	Cocaine	Inhalant	Opioid	Other	Poly*	Sedative, Hypnotic, Anxiolytic
Hawaii								
Female	1	5	6		1			
Male	5	11	6					1
Total	6	16	12		1			1
Kyushu								
Female		6		5		1		2
Male	1	14		17		3	5	2
Total	1	20		22		4	5	4

Meth-Amphetamine users

	Number	Age	Early Parental Loss <18	Education Over 12 Years
Hawaii				
Female	5	31.2	20%	80%
Male	11	36.5	9%	55%
Total	16	34.9	13%	63%
Kyushu				
Female	6	23	17%	67%
Male	14	29.2	36%	21%
Total	20	27.2	30%	35%

Referral sources to the treatment

	Court	CPS	Police	Refer from other mental health agents	Family	Self/Friend	History of Arrest
Hawaii							
Female		60		20			40
Male	45		9	18		27	73
Total	31	19	6	19		19	63
Kyushu							
Female				50	33	17	17
Male				50	43	7	71
Total				50	40	10	75

Choice of job

	Clerk	Transportation	Construction	Barber	Unemployed	Drug Dealer	Other
Hawai i							
Femal e	20			20	60		
Male		9	27	9	27	9	18
Kyus hu							
Femal e					100		
Male		7	21		57	7	7

Social Welfare recipients

		Recipient Of Social Welfare
Hawaii	Female	60
	Male	27
Total		37
Kyushu	Female	0
	Male	36
Total		25

Severity of Substance abuse problems measured by DAST-20

	DAST20 Sum
Hawaii	
Female	13.4
Male	14.6
Total	14.3
Kyushu	
Female	11.5
Male	14.1
Total	12.9

Comorbid mental Disorders 1

	Psychotic disorder				Manic episode		
	Never	Induced	S C	Other	Never	Hypomanic	Manic
Hawaii							
Female	60	40			100		
Male	36	55	9		100		
Kyushu							
Female	33	33	17	17	83	17	
Male	29	50	21		57	29	14

Comorbid mental Disorders 2

	Depressive episode		Suicide Attempt		Dysthymic Disorder		Eating Disorder	
	Never	Past or Current	Never	Attempt	Never	Past or Current	Never	Past or current
Hawaii								
Female	60	40	100		100	0	100	
Male	45	55	45	55	82	18	100	
Kyushu								
Female	50	50	83	17	50	50	83	17
Male	43	57	71	21	43	57	64	36

Conclusion

- Different society
 - Large differences of prevalence and medical, social, legal systems exists.
 - What are different are how the society or government, drug traffickers response to the drug users.
- The same people
 - Amphetamine dependent people from two sites showed similarities. This suggests that the biological, psychological, and social precedents of illicit drug use are similar in both countries.
 - Once an individual addicted to drugs, he or she acquires the common characteristics of the addict no matter how different his or her background is.
- Treatment should be;
 - The same modality, which works effectively at one area, is supposed to work similarly at other area.
 - Implementation should reflect local available resources.