

NATIONAL MENTAL HEALTH REGISTRY



PRELIMINARY REPORT OF THE NATIONAL MENTAL HEALTH REGISTRY JANUARY TO MAY 2003

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**PRELIMINARY REPORT OF THE
NATIONAL MENTAL HEALTH REGISTRY
JANUARY TO MAY
2003**

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Eli Lilly (M) Sdn Bhd

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Thank you

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INTRODUCTION

Year 2001 was a major landmark for psychiatry, mainly due to the efforts by The World Health Organization (WHO) that had highlighted the global issue of mental health to the whole world. Through the World Health Day, World Health Assembly and the World Health Report, WHO and its Member States have pledged their full and unreserved commitment to mental health as a critical public health issue.

Mental health problems rank fifth out of the 10 leading causes of disability worldwide, amounting to nearly one third of disability in the world. Leading causes include depression, substance abuse, schizophrenia and dementia. Based on the Global Burden of Disease Survey in 1990, mental and neurological disorders accounted for 10% of the total Disability Adjusted Life Years (DALY) lost due to all diseases and injuries. By 2020, it is projected that the burden of these disorders will increase to 15%. Common disorders which usually cause severe disability include depressive disorders, substance abuse disorders, schizophrenia, epilepsy, Alzheimer's disease, mental retardation, and disorders of childhood and adolescence.

Mental disorders are also common, affecting more than 25% of all people at some time during their lives. The message has been clear and unequivocal: mental health –neglected for too long - is crucial to the quality of life among individuals, societies, and countries, and must be universally regarded in a new light.

Following on with the events of 2001, it was obvious that there is a need for a clear coherent strategy to close the gap between what is urgently needed and what is currently available, and to reduce the burden of mental disorders in each country. One of those outlined by the mental health Global Action Plan (mhGAP) is to provide information for better decisions, namely regarding the magnitude, burden, determinants and treatment of mental disorders. Realizing this, psychiatrists from the Ministry of Health Malaysia during their annual meeting on 5-6 August 2002 had agreed to start a National Mental Health Registry. The main aim is to ensure that accurate information is readily available and accessible in a timely manner throughout the mental health sector. This in turn, creates the necessary conditions for the formulation and implementation of integrated policies and services, serving to generate more advocacy and information for better decisions. The registry would provide a good epidemiological database and enhance future research capacity in mental health.

Being a pioneer project in mental health, it was decided that the registry will only focus on new cases of schizophrenia. The reasons for choosing schizophrenia are obvious: - associated with chronic long term disability and suffering. Although the

incidence is low (3 per 10,000), the prevalence is high due to its chronicity. There are also effective interventions available and if early treatment is started, prognosis is better beside Schizophrenia also have economic implications. The registry also aims to collect data on mental illnesses e.g. depression and the other psychoses in the later phase. After a lot of brainstorming by the core team members together with suggestions from the Advisory Committee, a pilot project was carried out from 15 November till 15 December 2002. A post-mortem was done in December 2002 for trouble shooting purposes to finalize the CRF followed by a training session for the coordinators in the various participating departments, to ensure the uniformity and reliability of data collection.

Data collection for the NMHR began officially on the 1st January 2003 with the Mental Health Registry Unit (MHRU) acting as the central data collection for all source data producers. Data initially came from public sector, but beginning June 2003 there had been regular participation from the universities.

This report provides the preliminary data from the registry i.e. from Jan till May 2003. Although the figures are rather modest, it has given some insight regarding treatment practices and the public's help-seeking behaviour. As mentioned, the data provided here are based on the population in public hospitals and a university. It is possible that the year-end report would give a better representation of the schizophrenia patients in Malaysia i.e. with the inclusion of data from all universities. Efforts are being made to look at outcome parameters of this cohort of patients. The publication of this report and others to come would certainly assist the psychiatric fraternity to make sense of the services we provide and hopefully spearhead efforts to gradually relieve patients and families from the burden they have carried for so long.

Dato'Hj. Dr. Abdul Aziz Abdullah
Chairman
National Mental Health Registry
Advisory Committee

METHOD

1. OBJECTIVES

The objectives of the National Mental Health Registry are to:

1. Determine the disease burden attributable to mental disorders by quantifying its morbidity, and its geographic and temporal trends in Malaysia.
2. Identify subgroups in the population at high risk of mental disorders to whom prevention effort should be targeted.
3. Identify potential risk factors involved in mental disorders.
4. Evaluate the treatment, control and prevention of mental disorders
5. Stimulate and facilitate epidemiological research on mental disorder, e.g. generating hypotheses on etiology.

2. COVERAGE

There are 28 Psychiatry Departments under Ministry of Health (MOH) and 4 from local universities. Of these public operated psychiatry departments, 29 registered as source data producers from January 2003. This gave a coverage rate of 90.6% in the initial phase. If only the MOH Hospitals were taken into account, the coverage rate was 87.5%.

3. DISEASE REGISTRATION METHODS

The organizational structure of NMHR consists of sponsors, advisory committee, Mental Health Registry Unit (MHRU), and source data producers and target groups/users. The Psychiatry Service and the Clinical Research Centre, both of the MOH, jointly sponsor the registry. The NMHR is governed by an advisory committee who oversees the operations of registry. The Mental Health Registry Unit is based at the Clinical Research Centre, MOH, where collected data are analysed and reports generated. The source data producers are Departments of Psychiatry, both public and private, where mental disorders are reported. The users or target groups are individuals or institutions to which the regular registry reports are addressed.

The data standards are established based on the usefulness for mental health registry, ease of data collection and compatibility with other data set (e.g. DSM IV).

Two types of case record forms (CRF) are employed in data collection. The Schizophrenia Notification Forms gather information on patient demography, clinical history and process of care. The outcomes form collect data on medical outcomes, side effect, social functioning and quality of life. The CRFs are used as part of the clinical records. Regardless of age, all patients who were diagnosed as Schizophrenia are included in the registry. The completed forms are sent to MHRU where data are analysed, interpreted and presented in regular report to be disseminated to the users. Participation of source data producers is entirely voluntary.

The data transferred to MHRU are kept strictly confidential with access only to authorized individual working in the MHRU. Till May 2003, 30 centres have participated in the registry. They are from MOH Psychiatry departments (28 centres) and 2 from local universities (HUKM and HUPM).

4. STATISTICAL ANALYSIS

This report is a descriptive analysis. All data were described in terms of percentages except continuous data, like follow-up period and age, we calculated summary statistics like median, 25th percentile and 75th percentile, and then, median (50th percentile), mean, minimum and maximum value for age.

We ignored the missing data and confined the analysis to available data. Therefore, no imputation was done.

ABBREVIATIONS

CRC	Clinical Research Centre MOH
CRF	Case Report Form
MOH	Ministry of Health
HKL	Kuala Lumpur Hospital
SDP	Source Data Producers
CRA	Clinical Registry Associate
NMHR	National Mental Health Registry
MHRU	Mental Health Registry Unit
JPN	Jabatan Pendaftaran Negara
DUI	Duration of Untreated Illness

GLOSSARY OF TERMS

Disease Register	The ongoing systematic collection, analysis and interpretation of a specific disease data essential to the planning, implementation and evaluation of clinical and public health practice, closely integrated with dissemination of these data to those who need to know. The final link in the chain is the application of these data to the management, prevention and control of the disease. A registration system includes a functional capacity for data collection, analysis and dissemination linked to clinical and public health programs.
Site	The location of an SDP reporting data on registrable patients to the registry.
Source data producer	The individuals or institutions that report the required data to the registry.
Sponsor	The individuals or institutions that own the registry.
Advisory Committee	A committee, board, council, panel or group thereof that is established by the sponsors of the registry to govern the registry. The Advisory Committee shall direct and control the activities of the designated collaborating unit, which manages the day-to-day operations of the registry.

REPORT SUMMARY

From 1st January 2003 to 31st May 2003 there were 907 cases registered from 29 centres (28 MOH Hospitals and 1 University hospital). Of these cases there were 530 cases who had never had any medical intervention previously.

1 THE REGISTERED CASES

Sixty one percent (550 cases) of the cases were males as compared to 39 % (357 cases) for females with a ratio of (3:2). Cases were mostly Malaysian and only 2% were made up of non-citizen. Malays made up the majority of cases (53%) followed by Chinese (26%) and Indians (10%). They were mostly single, (68%) with only 24% being married. The youngest age was 14 years old and oldest was 85 years old male with a mean of 30.7 years for male and 34.6 years for female. More than 60% had secondary schooling till their PMR. Majority of these registered cases had either never been employed (15%) or unemployed (53%). Only 15% have full-time employment and 7% were self employed while 23% were housewives, 13% were students and 13% in the service industries (waiter, maid, barber, security guard). The mean weight was in the range of 50-59 kg.

The commonest type of Schizophrenia according to DSM IV is paranoid type (32%) followed by 25% of undifferentiated type. Thirteen percent was diagnosed as Schizophreniform disorders.

Regarding the Duration of Untreated Illness (DUI) – only 25% presented for treatment before 3 months of illness where as a total of 38% presenting after 1 year of illness. The mean for DUI is 26.1 months in male as compared to female 35.3 months. Nineteen percent of the registered patients had some form of comorbidity with 14% having substance abuse with cannabis being the most common substance abuse (7%). There were 4 % of the registered cases suffering from depression.

There were 10% (89 cases) of registered cases who suffered from a past or current medical illness. Hypertension and diabetes mellitus combined made up about 5% of the

cases (25 cases of hypertension and 22 cases of diabetes mellitus). Only 20 % of the cases had a family history of Schizophrenia.

2 TREATMENT

Forty eight percent of cases were put on typical antipsychotic while 14% were on atypical and 1% mixed. Those who were put on atypical were mainly students and housewives. Those with higher educational level has better chance to be put on atypical antipsychotic.

3 INCIDENCE

There were 530 (58%) new cases registered. They made up of 60% males and 40% females. The mean age for male is 28.1 years where as the mean age for female is 31.6 years.

Majority were Malays (56%), the Chinese and Indians contributed 22% and 9% respectively. Less than 30% had only primary school education or no formal schooling at all. Majority of the new cases had either never been employed (17%) or unemployed (50%). Only 15% have full time employment. Housewives made up the biggest occupational group followed by students (18%) and factory workers (10%).

The mean Duration of Untreated Illness (DUI) is 30.8 months in male as compared to 43.3 months in females with only about 20% presenting before the first 3 months of illness.

Twenty percent of the new cases had some form of comorbidity with 15% made up of substance abuse. Medical illness were reported by 8% of new cases with 4% being contributed by Hypertension and Diabetes Mellitus combine. Only 22% of the cases had a family history of Schizophrenia.

4 INCIDENCE TREATMENT

Forty seven percent of cases were put on typical antipsychotic where as 16% were on atypical and 2% on mixed. Those who were on atypical were mainly students and housewives. It was found that those with higher educational level has more chances to be treated using an atypical antipsychotic.

1. PATIENTS' CHARACTERISTICS

Table 1.1: Age distribution by gender

Age, years	Male N=548	Female N=357
Mean	30.7	34.6
Median	28	32
Minimum	14	14
Maximum	85	73

Age group, years	Male		Female	
	No.	%	No.	%
0-10	0	0	0	0
11-20	86	16	51	14
21-30	235	43	103	29
31-40	126	23	94	26
41-50	72	13	59	17
51-60	23	4	31	9
61-70	5	1	18	5
71-80	0	0	1	.3
>80	1	.2	0	0

Figure 1.1: Age distribution by gender

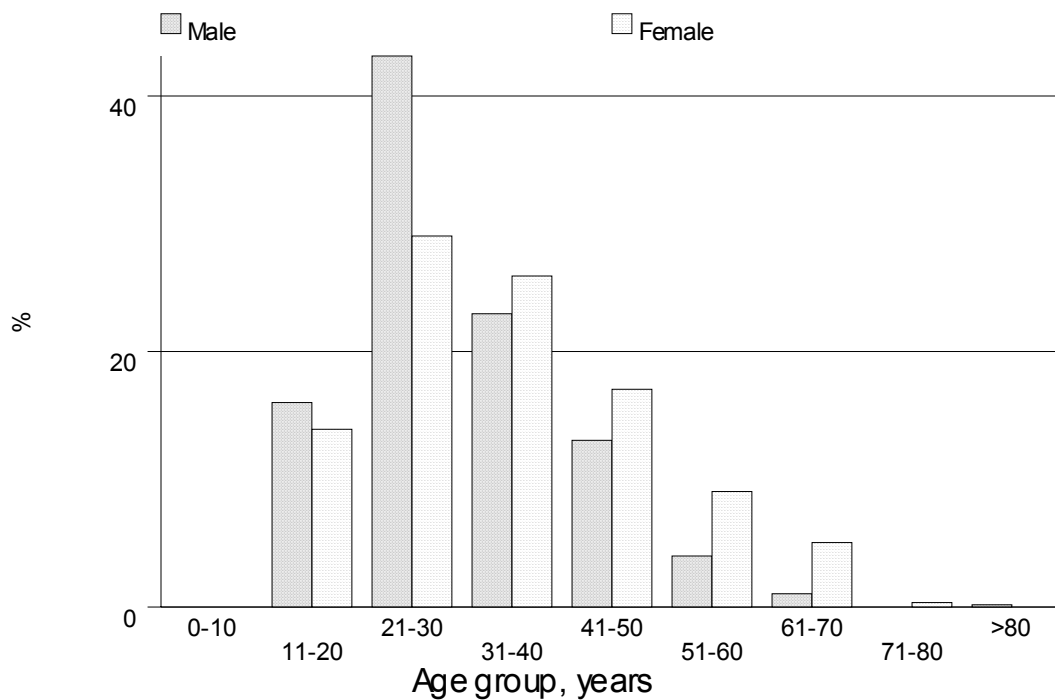


Table 1.2: Gender distribution

Gender	No.	%
N	907	100
Male	550	61
Female	357	39

Table 1.3: Citizenship distribution

Citizenship	No.	%
N	904	100
Malaysian	885	98
Non-Malaysian	19	2

Table 1.4: Ethnic group distribution

Ethnic group	No.	%
N	903	100
Malay	475	53
Chinese	239	26
Indian	90	10
Orang Asli	5	1
Kadazan	16	2
Iban	22	2
Others	56	6

Table 1.5: Marital status distribution

Marital status	No.	%
N	898	100
Single	612	68
Married	214	24
Widowed	14	2
Divorced	43	5
Separated	15	2

Table 1.6: Education level distribution

Education level	No.	%
N	886	100
No formal schooling	52	6
Primary school - not completed	65	7
Primary school - completed	152	17
Secondary school - PMR	262	30
Secondary school - SPM	274	31
Secondary school - STPM	30	3
Tertiary - Diploma	30	3
Tertiary - Degree	19	2
Tertiary - Masters/PhD	2	0.2

Table 1.7: Employment status distribution

Employment status	No.	%
N	907	100
Never Employed	133	15
Employed Part-time	92	10
Unemployed	484	53
Self-employed	64	7
Employed Full Time	134	15

Table 1.8: Present occupation distribution

Present occupation	No.	%
N	453	100
Professional/Technical/Managerial	21	5
Agricultural/Fishery/Forestry	33	7
Military/Police/Fireman	9	2
Factory Worker	42	9
Clerical/Sales	28	6
Service (e.g. Waiter, Maid, Barber, Security Guard)	58	13
Homemaker/Housewife	104	23
Own Business	27	6
Student	61	13
Others	70	15

Table 1.9: Distribution of weight in kg

Weight	No.	%
N	894	100
<20	0	0
20-29	1	0.1
30-39	36	4
40-49	165	18
50-59	348	39
60-69	206	23
70-79	92	10
80-89	32	4
90-99	8	1
>=100	6	1

Figure 1.9: Distribution of weight in kg

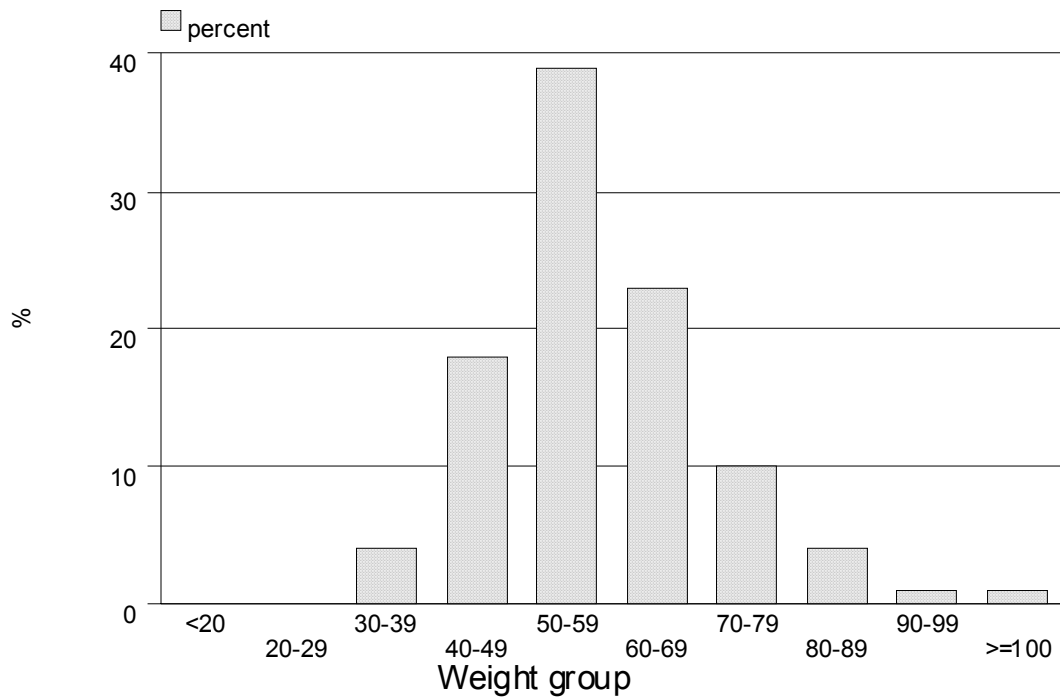


Table 1.10: Distribution of patients by centre

Centre	No.	%
All sites (29 centres)	907	100
1	24	3
2	26	3
3	117	13
4	7	1
5	68	7
6	17	2
7	64	7
8	38	4
9	53	6
10	19	2
11	54	6
12	22	2
13	66	7
14	9	1
15	15	2
16	9	1
17	25	3
18	57	6
19	13	1
20	25	3
21	17	2
22	8	1
23	22	2
25	9	1
26	1	0.1
27	21	2
28	16	2
29	70	8
30	15	2

2. CLINICAL HISTORY

Table 2.1: Distribution of type of psychiatric diagnosis

Principal psychiatric diagnosis	No.	%
N	906	100
Schizophrenia-Paranoid Type	286	32
Schizophrenia-Disorganized Type	146	16
Schizophrenia-Catatonic Type	13	1
Schizophrenia-Undifferentiated Type	225	25
Schizophrenia-Residual Type	89	10
Schizophreniform Disorder	120	13
Schizoaffective Disorder	27	3

Table 2.2: Distribution of characteristics at onset

Characteristics at onset	No.	%
N	866	100
Acute	295	34
Acute on Chronic	192	22
Chronic	221	26
Insidious	158	18

Table 2.3: Distribution of duration of untreated illness (DUI) in months by gender

Duration of untreated illness (DUI), months	Male	Female
	N=511	N=336
Mean	26.1	35.3
Median	12	12
Minimum	0	0
Maximum	624	420

Duration of untreated illness (DUI), months	Male		Female	
	No.	%	No.	%
<3	125	24	88	26
3-6	104	20	56	17
7-12	90	18	60	18
13-60	147	29	83	25
61-120	26	5	25	7
121-180	7	1	10	3
181-240	7	1	4	1
241-300	1	0.2	5	1
301-360	3	1	4	1
361-420	0	0	1	0.3
>420	1	0.2	0	0

Figure 2.3: Distribution of duration of untreated illness (DUI) in months by gender

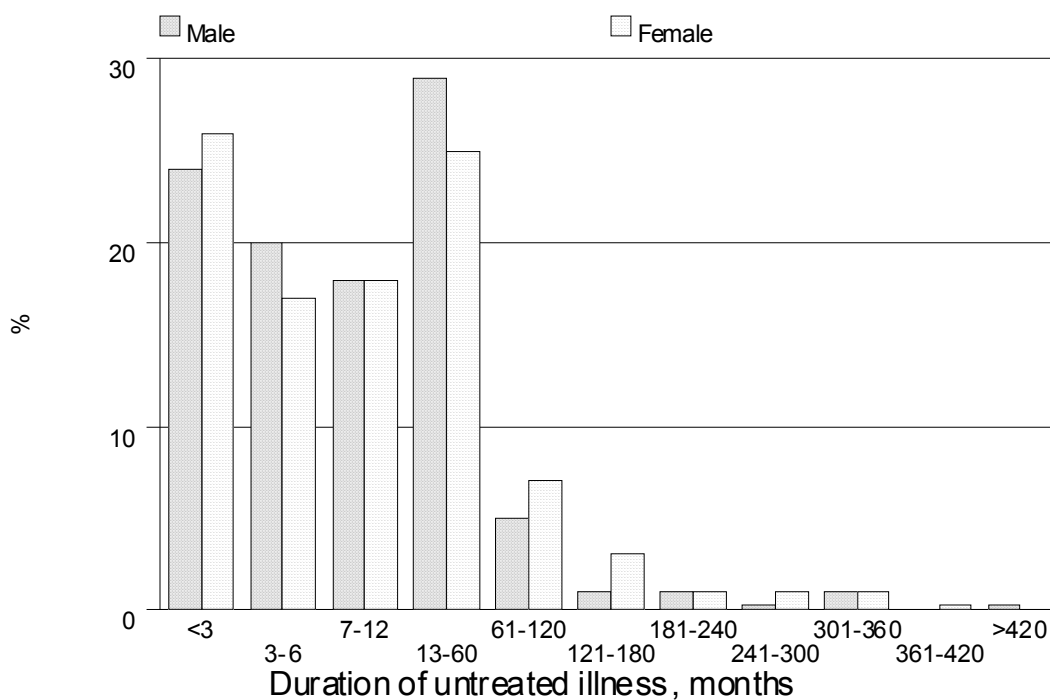


Table 2.4: Number of patients with comorbidities

Patients with comorbidities	No.	%
N	907	100
Patients with any co-morbidity	169	19
Patients with specific co-morbidity		
Substance Abuse		
1. Cannabis	65	7
2. Opiate	23	3
3. Meth/ Amphetamine	31	3
4. Inhalant	7	1
5. Alcohol	11	1
6. Others	17	2
Depression	32	4
Personality Disorder	6	1
Others	8	1

Table 2.5: Number of patients with other past and current medical illness

Patients with other past and current medical illness	No.	%
N	907	100
Patients with any past and current medical illness	89	10
Patients with specific past and current medical illness		
Diabetes Mellitus	22	2
Hyperthyroidism	3	0
Hypothyroidism	0	0
HIV/ AIDS	2	0
Syphilis	1	0
Head Injury	3	0
Epilepsy Disorder/ Seizure	6	1
Hypertension	25	3
Ischaemic Heart Disease	5	1
Chronic Lung Disease	0	0
Cancer	0	0
Others	34	4

Table 2.6: Number of patients with family history of schizophrenia

Family history of schizophrenia	No.	%
N	904	100
Yes	184	20
1. Parents	49	5
2. Siblings	66	7
3. Others	84	9
No	720	80

3. PROCESS OF CARE

Table 3.1: Circumstances Leading to Contact

Circumstances Leading to Contact	No.	%
N	907	100
Patients with any circumstances leading to contact	867	96
Patients with specific circumstances leading to contact		
Self Referral	61	7
Brought by Family	540	60
Brought by Police	173	19
Brought by Friend	14	2
Under Court Order	21	2
Others	114	13

Table 3.2: Care Setting at First Contact

Care Setting at First Contact	No.	%
N	860	100
Inpatient	410	48
Clinic	424	49
Community	26	3

Table 3.3: Route and Type of Pharmacotherapy

Route	No.	%
Oral		
1. Typical only	438	100
2. Atypical only	129	100
3. Mixed *	320	100
Depot		
4. Depot	214	100

* Mixed is a combination of typical, atypical or concomittant

Table 3.4: Route of Pharmacotherapy by centre

Centre	Route										
	N	Typical		Atypical		Oral		Mixed		Depot	
		No.	%	No.	%	No.	%	No.	%	No.	%
All centres	907	438	48	129	14	7	1	320	35	214	24
1	24	23	96	0	0	0	0	1	4	3	13
2	26	21	81	0	0	0	0	5	19	11	42
3	117	74	63	8	7	1	1	32	27	59	50
4	7	0	0	0	0	0	0	7	100	1	14
5	68	48	71	3	4	0	0	17	25	6	9
6	17	12	71	3	18	0	0	2	12	1	6
7	64	15	23	2	3	3	5	44	69	30	47
8	38	9	24	0	0	0	0	29	76	6	16
9	53	32	60	11	21	0	0	10	19	1	2
10	19	8	42	10	53	0	0	0	0	4	21
11	54	37	69	13	24	0	0	4	7	9	17
12	22	3	14	2	9	0	0	17	77	4	18
13	66	35	53	11	17	0	0	20	30	7	11
14	9	2	22	3	33	0	0	4	44	0	0
15	15	15	100	0	0	0	0	0	0	8	53
16	9	6	67	1	11	0	0	1	11	3	33
17	25	5	20	3	12	0	0	16	64	8	32
18	57	14	25	14	25	0	0	28	49	13	23
19	13	5	38	0	0	0	0	8	62	4	31

Centre	Route										
	N	Typical		Atypical		Oral Concomittant		Mixed		Depot Depot	
		No.	%	No.	%	No.	%	No.	%	No.	%
20	25	5	20	5	20	3	12	6	24	12	48
21	17	6	35	11	65	0	0	0	0	5	29
22	8	0	0	3	38	0	0	5	63	2	25
23	22	3	14	4	18	0	0	15	68	1	5
25	9	3	33	0	0	0	0	6	67	0	0
26	1	0	0	0	0	0	0	1	100	0	0
27	21	13	62	2	10	0	0	5	24	6	29
28	16	8	50	0	0	0	0	8	50	8	50
29	70	33	47	12	17	0	0	25	36	2	3
30	15	3	20	8	53	0	0	4	27	0	0

Table 3.5: Distribution of Principal Psychiatric Diagnosis by centre

	N	Schizophrenia – Paranoid Type		Schizophrenia – Disorganized Type		Schizophrenia Catatonic Type		Schizophrenia Undifferentiated Type		Schizophrenia Residual Type		Schizophreniform Disorder		Schizoaffective Disorder	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All centres	907	286	32	146	16	13	1	225	25	89	10	120	13	27	3
1	24	9	38	3	13	1	4	7	29	0	0	4	17	0	0
2	26	9	35	2	8	0	0	2	8	3	12	8	31	2	8
3	117	28	24	32	27	3	3	30	26	19	16	4	3	1	1
4	7	1	14	3	43	0	0	3	43	0	0	0	0	0	0
5	68	9	13	9	13	1	1	8	12	26	38	7	10	8	12
6	17	3	18	7	41	0	0	0	0	1	6	6	35	0	0
7	64	8	13	6	9	0	0	48	75	1	2	0	0	1	2
8	38	4	11	2	5	0	0	25	66	1	3	6	16	0	0
9	53	21	40	4	8	1	2	8	15	3	6	16	30	0	0
10	19	6	32	3	16	1	5	2	11	3	16	4	21	0	0
11	54	31	57	4	7	1	2	0	0	4	7	10	19	4	7
12	22	1	5	3	14	0	0	9	41	5	23	4	18	0	0
13	66	35	53	8	12	0	0	13	20	6	9	3	5	1	2
14	9	6	67	0	0	0	0	0	0	0	0	3	33	0	0
15	15	1	7	12	80	0	0	2	13	0	0	0	0	0	0
16	9	2	22	1	11	0	0	0	0	5	56	0	0	0	0
17	25	8	32	1	4	0	0	11	44	3	12	1	4	1	4
18	57	11	19	1	2	0	0	37	65	0	0	8	14	0	0
19	13	8	62	1	8	0	0	1	8	1	8	0	0	2	15

	N	Schizophrenia – Paranoid Type		Schizophrenia – Disorganized Type		Schizophrenia Catatonic Type		Schizophrenia Undifferentiated Type		Schizophrenia Residual Type		Schizophreniform Disorder		Schizoaffective Disorder	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
20	25	13	52	8	32	0	0	3	12	0	0	1	4	0	0
21	17	6	35	5	29	2	12	1	6	0	0	3	18	0	0
22	8	5	63	1	13	0	0	0	0	0	0	2	25	0	0
23	22	15	68	1	5	2	9	2	9	2	9	0	0	0	0
25	9	1	11	0	0	0	0	3	33	1	11	4	44	0	0
26	1	0	0	0	0	0	0	0	0	1	100	0	0	0	0
27	21	18	86	1	5	0	0	0	0	1	5	1	5	0	0
28	16	1	6	7	44	0	0	3	19	1	6	1	6	3	19
29	70	20	29	19	27	1	1	6	9	2	3	18	26	4	6
30	15	6	40	2	13	0	0	1	7	0	0	6	40	0	0

Table 3.6: Distribution of Principal Psychiatric Diagnosis in relation to Gender

Principal Psychiatric Diagnosis	N	Gender			
		Male		Female	
		No.	%	No.	%
All types	906	549	61	357	39
Schizophrenia-Paranoid Type	286	157	55	129	45
Schizophrenia-Disorganized Type	146	101	69	45	31
Schizophrenia-Catatonic Type	13	6	46	7	54
Schizophrenia-Undifferentiated Type	225	144	64	81	36
Schizophrenia-Residual Type	89	46	52	43	48
Schizophreniform Disorder	120	76	63	44	37
Schizoaffective Disorder	27	19	70	8	30

Table 3.7: Distribution of Principal Psychiatric Diagnosis in relation to Citizenship

Principal Psychiatric Diagnosis	N	Citizenship			
		Malaysian		Non-Malaysian	
		No.	%	No.	%
All types	906	884	98	19	2
Schizophrenia-Paranoid Type	286	281	98	5	2
Schizophrenia-Disorganized Type	146	144	99	2	1
Schizophrenia-Catatonic Type	13	10	77	3	23
Schizophrenia-Undifferentiated Type	225	222	99	3	1
Schizophrenia-Residual Type	89	87	98	1	1
Schizophreniform Disorder	120	115	96	3	3
Schizoaffective Disorder	27	25	93	2	7

Table 3.8: Distribution of Principal Psychiatric Diagnosis in relation to Education Level

Principal Psychiatric Diagnosis	N	Education Level							
		No formal schooling		Primary school		Secondary school		Tertiary	
		No.	%	No.	%	No.	%	No.	%
All types	906	52	6	217	24	565	62	51	6
Schizophrenia-Paranoid Type	286	19	7	63	22	176	62	21	7
Schizophrenia-Disorganized Type	146	8	5	45	31	84	58	7	5
Schizophrenia-Catatonic Type	13	1	8	3	23	7	54	0	0
Schizophrenia-Undifferentiated Type	225	7	3	52	23	149	66	12	5
Schizophrenia-Residual Type	89	6	7	32	36	45	51	5	6
Schizophreniform Disorder	120	8	7	19	16	86	72	4	3
Schizoaffective Disorder	27	3	11	3	11	18	67	2	7

Table 3.9: Distribution of Principal Psychiatric Diagnosis in relation to Family History of Schizophrenia

Principal Psychiatric Diagnosis	N	Family History of Schizophrenia			
		Yes		No	
		No.	%	No.	%
All types	906	184	20	719	79
Schizophrenia-Paranoid Type	286	65	23	221	77
Schizophrenia-Disorganized Type	146	27	18	118	81
Schizophrenia-Catatonic Type	13	4	31	9	69
Schizophrenia-Undifferentiated Type	225	52	23	171	76
Schizophrenia-Residual Type	89	10	11	79	89
Schizophreniform Disorder	120	23	19	97	81
Schizoaffective Disorder	27	3	11	24	89

Table 3.10: Distribution of Principal Psychiatric Diagnosis in relation to Comorbidities

Principal Psychiatric Diagnosis	Comorbidities										
	N	None		Substance abuse		Depression		Personality Disorder		Others	
		No.	%	No.	%	No.	%	No.	%	No.	%
All types	906	737	81	125	14	32	4	6	1	8	1
Schizophrenia-Paranoid Type	286	238	83	34	12	14	5	1	0	0	0
Schizophrenia-Disorganized Type	146	121	83	24	16	1	1	0	0	0	0
Schizophrenia-Catatonic Type	13	10	77	2	15	0	0	1	8	1	8
Schizophrenia- Undifferentiated Type	225	191	85	27	12	3	1	1	0	3	1
Schizophrenia-Residual Type	89	74	83	7	8	6	7	1	1	1	1
Schizophreniform Disorder	120	87	73	26	22	4	3	0	0	3	3
Schizoaffective Disorder	27	16	59	5	19	4	15	2	7	0	0

Table 3.11: Distribution of Principal Psychiatric Diagnosis in relation to Other Past and Current Medical Illness

Principal Psychiatric Diagnosis	Other Past and Current Medical Illness																											
	None			Diabetes Mellitus		Hyperthyroidism		Hypothyroidism		HIV/AIDS		Syphilis		Head Injury		Epilepsy Disorder/Seizure		Hypertension		Ischaemic Heart Disease		Chronic Lung Disease		Cancer		Others		
	N	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
All types	906	817	90	22	2	3	0	0	0	2	0	1	0	3	0	6	1	25	3	5	1	0	0	0	0	34	4	
Schizophrenia-Paranoid Type	286	249	87	8	3	2	1	0	0	0	0	0	0	2	1	4	1	9	3	1	0	0	0	0	0	16	6	
Schizophrenia-Disorganized Type	146	136	93	3	2	0	0	0	0	1	1	0	0	1	1	0	0	6	4	1	1	0	0	0	0	2	1	
Schizophrenia-Catatonic Type	13	13	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Schizophrenia-Undifferentiated Type	225	207	92	4	2	0	0	0	0	1	0	1	0	0	0	0	0	5	2	0	0	0	0	0	0	7	3	
Schizophrenia-Residual Type	89	70	79	6	7	1	1	0	0	0	0	0	0	0	0	2	2	4	4	3	3	0	0	0	0	5	6	
Schizophreniform Disorder	120	117	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	3	
Schizoaffective Disorder	27	25	93	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	

Table 3.12: Distribution of Principal Psychiatric Diagnosis in relation to Route of Pharmacotherapy

Principal Psychiatric Diagnosis	Route										
	N	Oral				Mixed		Depot Depot			
		No.	%	No.	%	No.	%	No.	%	No.	%
All types	906	437	48	129	14	7	1	320	35	213	24
Schizophrenia-Paranoid Type	286	136	48	52	18	2	1	92	32	64	22
Schizophrenia-Disorganized Type	146	91	62	19	13	1	1	31	21	54	37
Schizophrenia-Catatonic Type	13	8	62	2	15	1	8	2	15	1	8
Schizophrenia-Undifferentiated Type	225	84	37	18	8	3	1	118	52	64	28
Schizophrenia-Residual Type	89	50	56	6	7	0	0	31	35	19	21
Schizophreniform Disorder	120	55	46	31	26	0	0	33	28	6	5
Schizoaffective Disorder	27	13	48	1	4	0	0	13	48	5	19

Table 3.13: Distribution of Route of Pharmacotherapy in relation to Education Level

Education Level	Route of Pharmacotherapy											
	Oral								Depot			
	Typical			Atypical		Con-comittant			Mixed		Depot	
	N	No.	%	No.	%	No.	%	No.	%	No.	%	
All Levels	886	430	49	125	14	6	1	312	35	209	24	
No Formal Schooling	52	35	67	2	4	1	2	11	21	12	23	
Primary School	217	112	52	18	8	1	0	84	39	60	28	
Secondary School	566	264	47	95	17	4	1	195	34	125	22	
Tertiary	51	19	37	10	20	0	0	22	43	12	24	

Table 3.14: Distribution of Route of Pharmacotherapy in relation to Present Occupation

Present Occupation	Route of Pharmacotherapy											
	Oral								Depot			
	Typical			Atypical		Con-comittant			Mixed		Depot	
	N	No.	%	No.	%	No.	%	No.	%	No.	%	
All Occupations	453	210	46	84	19	3	1	150	33	83	18	
Professional/Technical/Managerial	21	5	24	5	24	0	0	11	52	4	19	
Agricultural/Fishery/Forestry	33	14	42	3	9	1	3	14	42	11	33	
Military/Police/Fireman	9	4	44	3	33	0	0	2	22	4	44	
Factory Worker	42	22	52	5	12	0	0	13	31	10	24	
Clerical/ Sales	28	12	43	9	32	0	0	7	25	4	14	
Service (e.g. Waiter, Maid, Barber, Security Guard)	58	28	48	5	9	1	2	23	40	12	21	
Homemaker/Housewife	104	53	51	17	16	1	1	31	30	21	20	
Own Business	27	13	48	5	19	0	0	9	33	3	11	
Student	61	20	33	27	44	0	0	14	23	1	2	
Others	70	39	56	5	7	0	0	26	37	13	19	

4. INCIDENCE

Table 4.1: Age Distribution by Gender

Age, years	Male N=319	Female N=210
Mean	28.1	31.6
Median	25	28.5
Minimum	14	14
Maximum	69	73

Age group, years	Male		Female	
	No.	%	No.	%
0-10	0	0	0	0
11-20	66	21	42	20
21-30	157	49	73	35
31-40	55	17	50	24
41-50	32	10	24	11
51-60	7	2	14	7
61-70	2	1	6	3
71-80	0	0	1	0.5
>80	0	0	0	0

Figure 4.1: Age Distribution by Gender

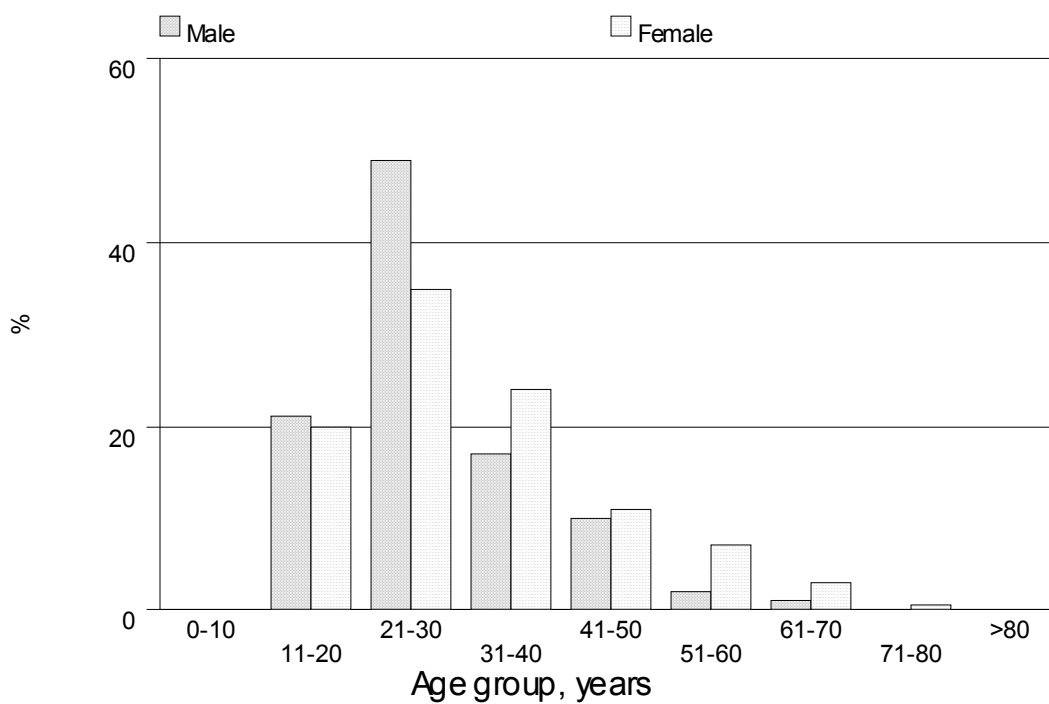


Table 4.2: Gender distribution

Gender	No.	%
N	530	100
Male	320	60
Female	210	40

Table 4.3: Ethnic group distribution

Ethnic group	No.	%
N	527	100
Malay	295	56
Chinese	116	22
Indian	45	9
Orang Asli	2	0
Kadazan	11	2
Iban	16	3
Others	42	8

Table 4.4: Education level distribution

Education level	No.	%
N	518	100
No formal schooling	30	6
Primary school - not completed	36	7
Primary school - completed	83	16
Secondary school - PMR	157	30
Secondary school - SPM	173	33
Secondary school - STPM	14	3
Tertiary - Diploma	17	3
Tertiary - Degree	7	1
Tertiary - Masters/PhD	1	0

Table 4.5: Employment status distribution

Employment status	No.	%
N	530	100
Never Employed	92	17
Employed Part-time	51	10
Unemployed	267	50
Self-employed	39	7
Employed Full Time	81	15

Table 4.6: Present occupation distribution

Present occupation	No.	%
N	283	100
Professional/Technical/Managerial	10	4
Agricultural/Fishery/Forestry	17	6
Military/Police/Fireman	5	2
Factory Worker	28	10
Clerical/Sales	18	6
Service (e.g. Waiter, Maid, Barber, Security Guard)	26	9
Homemaker/Housewife	63	22
Own Business	21	7
Student	51	18
Others	44	16

Table 4.7: Distribution of weight in kg

Weight	No.	%
N	526	100
<20	0	0
20-29	1	0.2
30-39	26	5
40-49	120	23
50-59	204	39
60-69	110	21
70-79	52	10
80-89	6	1
90-99	4	1
>=100	3	1

Figure 4.7: Distribution of weight in kg

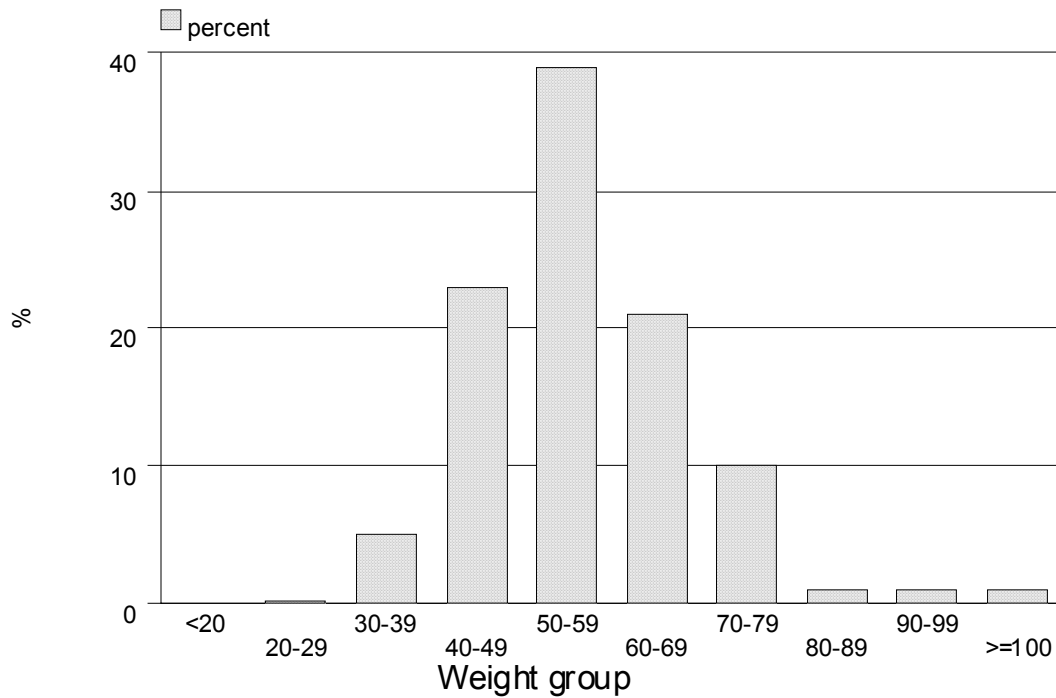


Table 4.8: Distribution of Route of Pharmacotherapy in relation to Education Level

Education Level	Route of Pharmacotherapy										
	Typical			Oral				Mixed		Depot	
	N	No.	%	No.	%	Con-comittant		No.	%	No.	%
All Levels	518	242	47	82	16	3	1	189	36	78	15
No Formal Schooling	30	20	67	2	7	0	0	8	27	6	20
Primary School	119	60	50	13	11	1	1	45	38	22	18
Secondary School	344	154	45	60	17	2	1	126	37	47	14
Tertiary	25	8	32	7	28	0	0	10	40	3	12

Table 4.9: Distribution of Route of Pharmacotherapy in relation to Present Occupation

Present Occupation	Route of Pharmacotherapy										
	Typical			Oral				Mixed		Depot	
	N	No.	%	No.	%	Con-comittant		No.	%	No.	%
All Occupations	283	135	48	57	20	0	0	90	32	28	10
Professional/Technical/Managerial	10	3	30	2	20	0	0	5	50	0	0
Agricultural/Fishery/Forestry	17	8	47	2	12	0	0	7	41	3	18
Military/Police/Fireman	5	1	20	2	40	0	0	2	40	1	20
Factory Worker	28	13	46	3	11	0	0	11	39	5	18
Clerical/ Sales	18	9	50	6	33	0	0	3	17	2	11
Service (e.g. Waiter, Maid, Barber, Security Guard)	26	15	58	1	4	0	0	10	38	2	8
Homemaker/Housewife	63	33	52	13	21	0	0	17	27	9	14
Own Business	21	10	48	4	19	0	0	7	33	1	5
Student	51	18	35	21	41	0	0	12	24	0	0
Others	44	25	57	3	7	0	0	16	36	5	11

Table 4.10: Distribution of duration of untreated illness (DUI) in months by gender

	Male		Female	
Duration of untreated illness (DUI), months	N=311		N=206	
Mean	30.8		43.3	
Median	12		12	
Minimum	0.3		0.3	
Maximum	624		420	

	Male		Female	
Duration of untreated illness (DUI), months	No.	%	No.	%
<3	62	20	41	20
3-6	63	20	35	17
7-12	49	16	36	17
13-60	103	33	59	29
61-120	20	6	17	8
121-180	5	2	4	2
181-240	5	2	4	2
241-300	1	0.3	5	2
301-360	2	1	4	2
361-420	0	0	1	0.5
>420	1	0.3	0	0

Figure 4.8: Distribution of duration of untreated illness (DUI) in months by gender

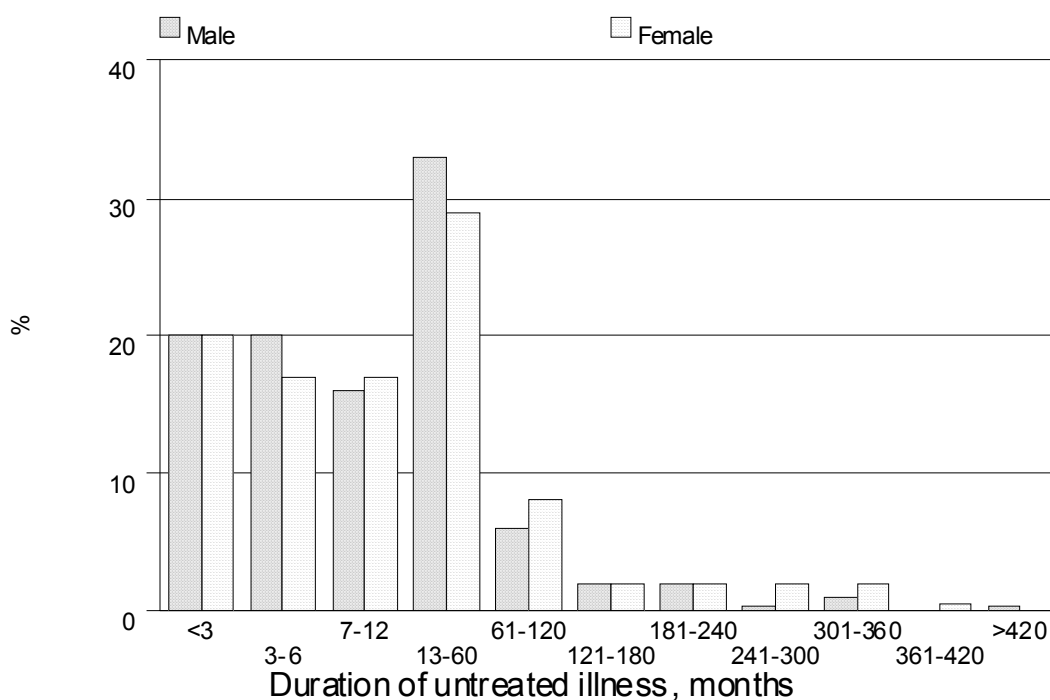


Table 4.11: Number of patients with comorbidities

Patients with comorbidities	No.	%
N	530	100
Patients with any co-morbidity	107	20
Patients with specific co-morbidity		
Substance Abuse		
1. Cannabis	40	8
2. Opiate	12	2
3. Meth/ Amphetamine	20	4
4. Inhalant	3	1
5. Alcohol	7	1
6. Others	12	2
Depression	20	4
Personality Disorder	5	1
Others	6	1

Table 4.12: Number of patients with other past and current medical illness

Patients with other past and current medical illness	No.	%
N	530	100
Patients with any past and current medical illness	44	8
Patients with specific past and current medical illness		
Diabetes Mellitus	8	2
Hyperthyroidism	1	0
Hypothyroidism	0	0
HIV/ AIDS	0	0
Syphilis	0	0
Head Injury	1	0
Epilepsy Disorder/ Seizure	4	1
Hypertension	10	2
Ischaemic Heart Disease	2	0
Chronic Lung Disease	0	0
Cancer	0	0
Others	23	4

Table 4.13: Number of patients with family history of schizophrenia

Family history of schizophrenia	No.	%
N	530	100
Yes	119	22
1. Parents	32	6
2. Siblings	36	7
3. Others	59	11
No	411	78

Table 4.14: Route and Type of Pharmacotherapy

Route	No.	%
Oral		
1. Typical only	247	100
2. Atypical only	85	100
3. Mixed *	193	100
Depot		
4. Depot	78	100

* Mixed is a combination of typical, atypical or concomittant

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