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Rehabiliation model to prevent relapse among drug users in health system

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Abstract

Addiction a disease lie in between a complex behavior with social intervenes. A systemic model needs to design, for the therapeutic management of addiction in psychosocial environment of assessment and implementation. Keeping in mind a bare fact of unique intellectual characteristics of each drug respondent. To provide a detailed model which enhance the process of drug addiction recovery aiming to decrease relapse cases that can be integrated as part of the drug rehabilitation process in Malaysia. There is a five phase Drug Abstinence Model for the time span of 2 years. General public awareness (Gpa), Motivation and willing persuasion (Mp), Assessment and Screening (AS), Maintenance / withdrawal therapy (Mt), Relapse Prevention Centre (RPC). All of these five stages ensure to fulfill the gaps between the psychological, social and integrated medication.

Key-Words: Rehabilitation, Rehab center, Addiction, Drug abuse, Drug rehab.

Introduction

The Global epidemic of opiate use continue to spread and it causes an increasing burden to both developed and under developing countries[1]. Inevitably Malaysia is just another country that has to deal with this Global Burden; a lot of studies have been carried out in Malaysia related to that of drug abuse and addiction. Simultaneously Malaysian anti narcotics taskforce is progressively working on the preventive and control measures of narcotics abuse[2]. Malaysia has the fastest growing economies in South East Asia with a population of approx. 26 million; experiencing extreme problems associated with the use of illicit drugs, there were 235495 registered drug users and offenders are registered in between 1988 to2002. Similarly, heroin accounts for 63% of drug abuse treatment admissions and 69% of drug related criminal offenses in Malaysia (National Drug Information[3].

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According to the 2006 consensus report of National Anti drug agency, Ministry of Internal security of Malaysia showed that number of addicts release from rehabilitation center were almost the same as caught prison (5,366 release : 5554 caught).

The NADI showed that total number of addicts up to the March 2000 was about 36,350 persons, 17,373 were new respondents while the remaining 18,977 were the relapsed cases (NADI). Governmental Anti-narcotic taskforce indicated that 275,499 heroin addicts were registered in 2004. WHO estimates that only one of four drug addicts are registered. Anti narcotic taskforce revealed that out of the 10,473 cases recorded from January to March 2005, 46.2% were new respondents and the remaining 53.8% were recidivist cases. Malaysian government is currently spending more than RM50mil per year for drug rehabilitation centre alone. The factors which influence drug-taking behavior are complex and multifaceted which include; Personal, social, economic, family, environmental and physiological[2].

Objective

To provide a detailed model which enhance the process of drug addiction recovery aiming to decrease relapse cases that can be integrated as part of the drug rehabilitation process in Malaysia.

Material and Methods

Methodology model development

Extensive reviews of all the official and journal publications were done for the designing of this model. All the gaps and flaws i.e., mentioned in other researches were keeping in account for model's basic design. This model is a second complimentary part of research done in Penang on methadone maintenance treatment. Psychologist consultation and official reviews, ideologically develops a sequence of this model. Model is not yet validated on some economic terms. Assessment questionnaires were developed with the corporation of psychiatric team of General Hospital Pulau Pinang.

RPM (Relapse Prevent Model)

- **Objective** of this model is to achieve a proper medication and management system in Rehabilitation centers as to reduce the relapse causes in Respondents.
- **Stages** are :
  - General public awareness (Gpa)
  - Motivation and willing persuasion (Mp)
  - Assessment and Screening (AS)
  - Maintenance / withdrawal therapy (Mt)
  - Prevention Centre (RPC)

1. General public awareness:

- Public awareness seminars:
  Workshops in universities and colleges
  Developing Questionnaires and feed back
- Brouchers and Pamphlets.
- Media Presentation, e.g., T.V, newspaper etc

2. Motivation and willing persuasion:

- Psychologist / Pharmacist / health Professionals are in the motivative community.
- Motivation can be done by either Psychotherapy or through religious interventions.
- At this moment, only specified group of Respondents in dealing with Professionals.
- Advice is the art of motivation that plays a vital role in persuasion.
- Infact at this stage the intellectual willing of abandon Drug Abuse is provoked.
- Motivation leads to selection criteria.

3. Assessment and screening: (Appendix 1 and 2)

- This stage is for the assessment of the intellectual willing to abandon.
- To accomplish this stage certain data collection form will be generated that contains few questions related to withdrawal conditions each question contain some ranked marks that shows the personal assessment of willing.
- Classification is shown in the flow chart.
- Screening is done to detect the type of Drug abuse (Research Report No. 25, 1990).

4. Maintainance / withdrawal therapy:

- Level of dependency can be checked firstly.
- Dose management to that of condition.
- Course design as that of standard guidelines.

5. Relapse prevention centre:

- Ex. Respondents should be stay in these centres for about 6 months followed by psychotherapy and other social encouragements.
- Access to general public and share the thoughts and ideas.
- Arranging educational / other seminars for the moral backup.
- Follow-up screening for about after every 2 months for at least 1 year.
- Grand offer for social support (if needed).

Results and Conclusion

Table 1: Drug Addiction Classifications

Type of Addiction	Involvement and illustration
Type I	3 years Devoted to addiction.
Type II	4 years Devoted to addiction (largest time incarcerated)
Type III & IV	6 years Devoted to addiction
Type V	8 years Devoted to addiction
Type VI	9 years Devoted to addiction (shortest time incarcerated)

Source: Research Report No. 25, 1990

Table 2: Dose management indicators

Phases of Methadone Maintenance therapy (MMT)	
Phase	**Objective**
Initial induction	Relieve withdrawal symptoms
Early induction	Reach tolerance level, reduce craving
Late induction stabilization	Establish adequate dose (physical and emotional well-being)
Maintenance	Preserve desired effects (steady-state occupation of opioid receptors)

Source: Leavitt S.B[4]

Table 3: Dosing Guidelines and Comparison:

INDUCTION DOSING GUIDELINE	
Methadone Dose Range	**Country (Ref)**
Initial dose does not exceed 30mg or 40 my total in first day.	USA (Federal Register 2001)
Initial dose 10-20mg if tolerance is low or uncertain; 25-40mg if opioid toleranced established.	UK (Strang 1999)
Initial dose is 10-20mg if opioid tolerance is low or uncertain; 25-40mg if tolerance is high.	Europe (Verster and Buning 2000)
20-30mg/d at first, more than 30mg on first day only in patients with tolerance threshold known to be quite high.	EUROPAD Italia (Maremmani et al. 2002)
15-30mg/d during the first 3 days (which represents time to 87.5% of steady state).	Canada (Health Canada 2001)
Initial dose 20-40mg, based on estimated tolerance and documented drug use 3-days prior.	Australia (Humeniuk et al. 2000)

Questionnaires:

Appendix 1

INITIAL SCREENING FORM FOR RESPONDENTS UNDER STUDY:

This form provides us information about the willingness of respondent to stop drug abuse or not and also provide primary data needs to asses in the pilot study programme.
This form is retained within the respondents profile and used only for statistical analysis.

Screening questions:

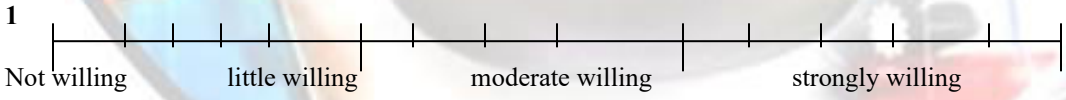
Q.1 what is Drug abuse in your view :- (tick only one option)

1. It kills yourself. □
2. It helps you to maintain Good life. □
3. It has no effect in your life. □

Q.2 Do you think that Drug abuse can be treated:

1. Strongly agree □
2. Agree □
3. Tends to agree □
4. Not agree □

Q.3 Are you willing to stop Drug abuse :- (give number from 1-13)



NO OF POINT OBTAINED: _____

1. Not willing □
2. Little willing □
3. Moderate willing □
4. Strongly willing □

Used only by the authorized personnels.

CALCULATION OF POINTS AND SPECIFIC RANGES:

QESTION NO.1 POINTS DISTRIBUTION IS:-

Option no: 1 = 3
Option no: 2 = 2
Option no: 3 = 1

QUESTION NO.2 POINTS DISTRIBUTION IS:-

Option no: 1 = 4
Option no: 2 = 3
Option no: 3 = 2
Option no: 4 = 1

QUESTION NO.3 POINTS DISTRIBUTION IS:-

Not willing = 1-3
Little willing = 4-6
Moderate willing = 7-9
Strongly willing = 10- 13

Ranges:

Strongly willing	=	16 – 20 points
Moderate willing	=	10 – 15 points
Little willing	=	6 – 9 points
Not willing	=	3 – 5 points

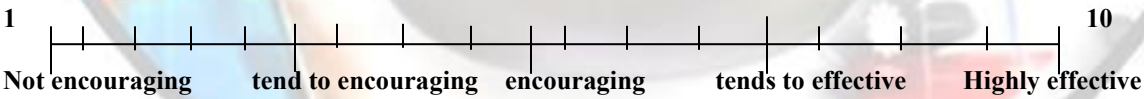
Appendix 2

FINAL ASSESMENT AND SCREENING FORM AFTER COMPLETING PILOT STUDY:

This form is made to provide us information about the effectiveness of the study and necessary information for the final statistical analysis.

Assessment:-

Q.1 What do you think about the effectiveness of this programme (please select the number from 1 – 10**).**



Q.2 Are you satisfied with this study programme:- (please tick the option)

1. Not satisfied ☐
2. Tend to satisfied ☐
3. Satisfied ☐
4. highly satisfied ☐

Q.3 Do you think that you still want some more therapy: - (please tick one option)

1. No □
2. Little □
3. Little more □
4. Yes □

Q.4 In the future are you again go back to drug abuse: -

1. Never □
2. May not be □
3. may be □
4. Yes □

Q.5 Reason: (if the answer of Q.4 is yes)

Calculations and points range distribution:

Question no.1 points distribution is: -

Not encouraging	=	1 – 2 points
Tend to encouraging	=	3 – 4 points
Encouraging	=	5 – 6 points
Tends to effective	=	7 – 8 points
Highly effective	=	9 – 10 points

Question no.2 points distribution is: -

Not satisfied	=	1 point
Tend to satisfied	=	2 points
Satisfied	=	3 points
Highly satisfied	=	4 points

Question no.3 points distribution is: -

No	=	4 points
Little	=	3 points
Little more	=	2 points
Yes	=	1 point

Question no.4 points distribution is: -

Never	=	4 points
May not be	=	3 points
May be	=	2 points
Yes	=	1 point

Range:

1. Not relapsed	=	18 – 22 points
2. May not be relapsed	=	12 – 17 points
3. May be relapsed	=	8 – 11 points
4. Definitely relapsed	=	4 – 7 points

Why this model is effective?

Model effectiveness can only be diagnosed by the outcomes of the model system. In general overview it was observed that the relapses occurred due to drop-out from the therapy, intervals in treatment, lack of psychological development, lack of social support or other economic and financial resources. All these predictors were well-influenced on the patient recovery or relapsed. So followings are the key factors influencing on the model effectiveness:

1. Length of stay in rehabilitation center is 2 years, so same as this model.
2. Stick with the therapy complete and regular basis for 2 years.
3. Least chances to take drugs during the therapy as therapy done in the rehabilitation center.
4. Encouraging social and financial aid.

5. Profound monitoring on patient activity and psychological development.
6. Rehabilitation center as rehabilitation theme; concerning of total social and psychological re-development.
7. Less incredible cost as the assessment done on the initial basis to further enrollment in medication plan.
8. Less chances of relapse, on the final assessment and step wise analysis of patient.
9. More profound dose management plan as the patient tolerance level with the behavioral involvement will be assess before the plan development.
10. Least chances of overdose with other drugs and take-away home adverse effects of methadone as 24-hours supervision done by rehabilitation center's medical staff.
11. Generation of financial resources, to cop the economic slum among the patients not supported by their family.

Recommendations:

1. A validated persuasion and willingness level must be evaluated through the help of professionals e.g. psychologists etc.
2. A near-perfection and individualized drug program designed for the replacement therapy and monitored by specialist.
3. A well defined structure for shift dependence program must be organized to release productive individual to the community with collaboration of external parties of NGO and non-NGO.
4. Financial aid offerings needs to be ascertained in granting benefits by constantly reviewing the progress of aid disbursement and utilization

Acknowledgement

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