CONCEPT OF TREATMENT EVALUATION

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Introduction

- The broader goal of treatment evaluation is to enhance treatment efficiency and cost-effectiveness using the information that comes from evaluation activities.
- This presentation was prepared on the basis of Work Books on Evaluation of Psychoactive Substance Use Disorder Treatment (joint publication of WHO, UNDCP, EMCDDA) available at http://www.emcdda.europa.eu/

What is treatment

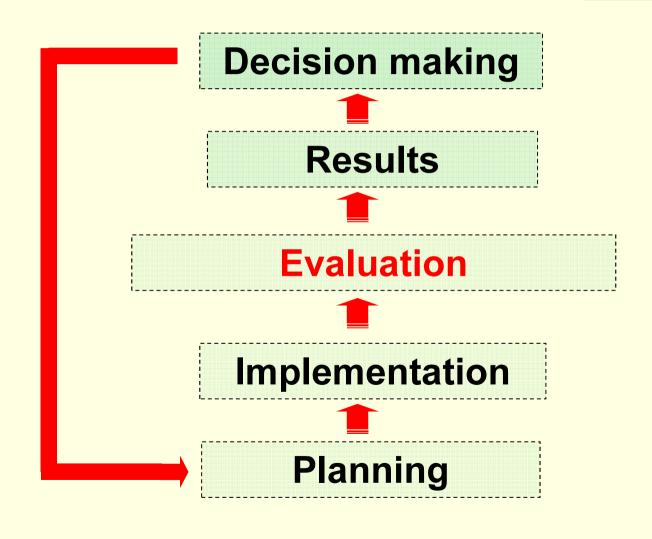
- The term treatment is used to define the process that begins when client come into contact with a health provider or other community service, and may continue through a succession of specific interventions until the highest attainable level of health and well-being is reached.
- Treatment and rehabilitation are defined as a comprehensive approach to detection, assistance, health care, and social integration of persons presenting problems caused by any psychoactive substance.

What is evaluation

- Evaluation as a set of procedures to assess treatment process and outcome
- Evaluation as an attitude of continually questioning and gaining information



Evaluation culture



Purposes of treatment evaluation

- Evaluation will help to:
 - Identify treatment needs
 - Plan needs-based interventions
 - Show if these interventions are consistent with need and plans
 - Show if these interventions are effective and efficient
 - Inform which type of intervention is most costeffective

Levels of treatment evaluation

- Single case (individual approach clinical practice)
- **Treatment activity** (a group of clients with a particular treatment modality, e.g. cognitive-behavioral therapy)
- **Treatment service** (a group of clients one treatment service, e.g., outpatient can include more than one treatment activity or modality, e.g., cognitive-behavioral therapy, relapse prevention, social skills training)
- **Treatment agency** (a group of clients with the entire agency and their progress towards treatment objectives)
- **Treatment system** (the involvement of clients with various agencies and services and monitors their progress toward a number of objectives)

Specialized types of evaluation

- Needs assessment
- Process evaluation
- Cost evaluation
- Client satisfaction evaluation
- Outcome evaluation
- Economic evaluation

Needs assessment

- Needs assessment evaluation is a formal and systematic attempt to determine, and then close, gaps between "what is" and "what should be"
- Needs assessment involves both need identification and need prioritization.
- Examples of needs assessment questions:
 - What type of treatment interventions should a program provide?
 - How many people should be anticipated each year in our services?
 - What is the prevalence and incidence in the community?
 - What are the main gaps in the community treatment system?

Process evaluation

- Process evaluation seeks to determine the extent to which the program is operating as planned
- The basic purpose of process evaluation is to describe what is happening in the program, and the context in which it is operating
- Examples of process evaluation questions:
 - How many clients are treated each year?
 - Is the type of clients being seen for whom the program or treatment system has been designed?
 - Are people having trouble accessing the program? How long is the waiting list and how are people being managed while they wait?
 - Are the staff conducting client assessments appropriately trained and using "state-of-the-art" methods?

Cost evaluation

- The general aim of these studies is to trace the resources used under different circumstances
- There are three broad questions that could be addressed:
 - What is the cost of treating clients?
 - If alternative treatment approaches are producing equivalent outcomes, how do these approaches compare in cost?
 - What are the different costs involved in the delivery of a service or service system? How do changes in costs relate to activity levels?

Client satisfaction evaluation

- Measuring client satisfaction with treatment provides valuable feedback about the extent to which service activities have met client expectations
- Examples of client satisfaction evaluation questions:
 - Have the services received met the client's expressed needs?
 - Are there aspects of the services that clients think could be improved?
 - What is the perceived quality of care from the client's perspective?

Outcome evaluation

- An evaluation of treatment outcomes should accomplish two things:
 - measure how clients and their circumstances have changed
 - show that the treatment experience has been a factor in causing this change (impact evaluation)
- Examples of outcome evaluation questions:
 - Have improvements been made in the aspects of the person's life that were affected by drug use?
 - Has there been a reduction in the frequency and/or quantity of drug use?
 - Are improvements related to particular characteristics of the client and their social circumstances?
 - What is the relationship between program or system participation and client improvement?

Economic evaluation

- This type of evaluation involves identifying, measuring, valuing, and comparing costs and outcomes of alternative interventions.
- There are three broad questions addressed in economic evaluation:
 - Is treatment worthwhile?
 - Should investment (or further investment) be made in treatment "A" or treatment "B"?
 - Should PSU interventions be chosen over other health or welfare interventions?

Steps of evaluation

- Develop evaluation plan
- Prepare for data collection
- Collect data
- Analyze data
- Report results
- Make use of what was learned
- Start again

Description of program for evaluation

- Developing program logic model
- Structure for program description
 - Resources that are organized for a common purpose
 - Activities that are planned and undertaken
 - Immediate outcomes that are to be achieved
 - Longer term outcomes that are intended
 - Other positive or negative consequences or side-effects

Program logic model

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Counseling

Education

Family intervention

Implementation objectives

- to provide individual counseling
- to provide group counseling
- to implement clients' treatment plans
- to provide information on consequences of substance use
- to teach basic life skills

- to provide individual counseling to parents
- to organize meetings with family members

Planed short-term outcome objectives

- to stop drug use
- to increase clients motivation for further treatment
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- to increase clients knowledge on consequences of substance use
- to improve client's social functioning

- to improve family relationships
- to reach family support

Planed long-term outcome objectives

- to maintain client's abstinence
- to increase client's health
- to improve client's social adaptation

Identification and prioritization of evaluation needs

- What would we like to know and why?
- Evaluation needs are formulated in terms of broad questions or areas to be investigated
- Evaluation needs from perspective of various groups involved in organization of treatment
 - treatment facility staff
 - clients
 - funder(s)
 - community
- Necessity of discussion and mutual identification and prioritization of evaluation needs

Defining evaluation questions

- Evaluation needs should be narrowed down to precise evaluation questions
- Evaluation questions should be generated basing on program logic model
- Questions can be addressed about any part of the program structure, logic or process

Determining research measures

- Indicators measures used for process and outcome evaluation
 - Indicators of implementation objectives
 - Indicators of outcome objectives
- Indicators should be measurable
- Examples:
 - Counseling implementation number of hours, quality of contact with client, level of trust
 - Change in extent of drug use (outcome) decrease of number of days with drug use, decrease of proportion of use by injection

Quantitative and qualitative indicators

- Quantitative indicators measurement is conducted through **numbers**
 - conveniently summarize a large amount of data reflecting key objectives of a program
- Qualitative indicators measurement is conducted with words
 - can preserve the unique point of view of the people being studied
 - can give more in-dept insight into studied issue

Data collection methods

- Analyze of routinely collected data patient's files, routine statistics,
 - Data from treatment center
 - Data from other institutions
- Self-administrated standardized questionnaire or test
- Interview using standardized questionnaire or test
- In-depth interview
- Focus group
- Observation

Preparation of data collection plan

- Setting a time frame for data collection
 - Time period of the study
 - Continuous data collection
 - Repeated measures (particular time points)
- Determining the sample
 - Whole population
 - Random sample
 - Other types of samples
 - Issues of sample size

Preparation of data analyze and reporting plan

- Data analyze plan is dependent on nature of the evaluation questions and types of indicators
- Quantitative indicators
 - can be analyzed using statistical techniques
 - can be easily translated into graphs which portray the results of an evaluation
- Qualitative indicators
 - Interpretation of interviews or descriptions
 - typologization

Ethical issues

- In principle the ethical rules of evaluation exercise are similar to rules valid in health service
- Some additional rules are attributable to research process
- Ethical rules provide the base for mutual trust between researchers and people under study and in this way determinate data reliability

General ethical principle

People being studied need to be protected from undue burdens on their time, invasion of privacy, and risks or other harms.

The results of the study should not violate interest of people being studied.

You need to pay attention to these ethical issues!

Confidentiality

- The personal data of participants (the name, address, or any identifying information) must be never revealed
- If researchers want to publish a case report of a participant or a group of participants, they must change enough details so that no one could discover the identity of the person or group
- The procedures to ensure that all information collected about any person will remain anonymous must be developed.

Conclusions

- Evaluation results provide basis for improvement of treatment efficiency and costeffectiveness
- Treatment program should be structured and precisely described
- Evaluation should be carefully planned taking into account evaluation needs and available resources
- Evaluation results should be discussed among all stakeholders and used for treatment improving

Questions for discussion

- Advantages and disadvantages of conducting evaluation in your circumstances
- How structured is your treatment activity?
 - Did you develop treatment program?
 - Which kind of activities is undertaken?
 - Did you set up short-term objectives?
- What are your evaluation needs?
- Which specialized type of evaluation would be most useful?
- How could be used evaluation results?