

**BELGIAN SCIENCE POLICY**



**Evidence-based practice in substance abuse treatment  
in Belgium: a state of the art**

**SUMMARY**

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# 1. Background and problem situation

Recently, a growing need for the implementation of evidence-based practices in substance abuse treatment can be noticed in the international literature (Amodeo, Ellis & Samet, 2006; McGovern, Fox, Xie & Drake, 2004; Miller, Sorensen, Selzer & Brigham, 2006). Also, in Belgium this need has been expressed (Pieters, 1999; Broekaert, Vandeveld, Vanderplasschen, Soyez & Poppe, 2002; Henneman, Geirnaert, & Stevens, 2004). Evidence-based is a term that has been deduced from 'evidence-based medicine' (EBM) and refers to a movement within medical sciences that originated under the impetus of a large coalition of physicians, researchers, professors and policy makers, to fasten and improve the application of results or evidence from experimental scientific research in clinical practice (Haynes et al., 1996). EBM is defined by Sackett et al. (1996) as "... the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research" (Van Driel et al., 2003).

'Evidence-based medicine' is based on an important ethical principle (Schotsmans, 1998): it intends to give patients access to the best diagnostic and therapeutic interventions and techniques that are available. Moreover, this movement is based on a social engagement to use the available resources as efficiently as possible, in order that health care services remain accessible for as many people as possible (Lemiengre, 1998; Van Driel et al., 2003).

According to Sackett et al. (1996), many advantages are associated with the implementation of 'evidence-based medicine' (Degryse, 1998). EBM offers the possibility to practice medicine in a more effective and efficient way, provides a more rational basis to take policy decisions and it gives the opportunity to develop a common concept for the evaluation of scientific research. Moreover, EBM is a new basis for education and training, it offers the possibility to achieve continuity and more uniformity of care, and provides more clarification on missing links and shortcomings in our current scientific knowledge (Van Driel et al., 2003).

Besides advantages, also some disadvantages are associated with the implementation of 'evidence-based medicine', and 'evidence-based practice' in general. It requires a minimum of time and infrastructure, computer skills, skills in 'critical reading' and statistical knowledge and it is sometimes perceived as threatening, because deep-rooted customs are questioned and because of a lack of evidence from clinical research (Van Driel et al., 2003). Furthermore, it is sometimes argued that 'evidence-based medicine/practice' puts aside the language of morality for the language of economy: talking about care, dignity and goodness would be pushed aside by talking about advantages, effects and saving costs (Vetlesen & Henriksen, 2003). Since the market seems to have the solution for all problems in society, the market also has the power to decide what interventions are worth to develop and which needs to be stopped or to be diminished.

The growing interest for 'evidence-based practice' can also be interpreted as a willingness and readiness to bridge the gap between research and practice in substance abuse treatment (Trinder, 2000; Gambrell, 2003). More and more, it is acknowledged that extra efforts are needed to bridge the gap between practitioners, researchers and policy makers in order to promote the implementation of evidence-based practices (Lamb et al., 1998), especially in substance abuse treatment and other settings in health care (Edmundson & McCarty, 2005; McLellan, 2002; Moore et al., 2004; Simpson, 2002). Never before, so many efforts have been made to register, systematize and look at what is actually happening in substance abuse treatment. There is a great need for such information, that can provide valuable clues for the planning and realisation of a more qualitative and more efficient substance abuse treatment system (Ravndal, 2005).

The challenge is to choose for interventions that are supported by evidence – as far as evidence is available – and that are adapted to the specific values, conventions and situation within our society (Hannes, 2006). The diversity concerning the implementation of available methods and interventions in substance abuse treatment and the lack of clarity on its effects, ask for univocal evidence-based guidelines and protocols for adequate implementation and practice. A lack of adherence and fidelity to the original model while implementing a specific intervention does not only debilitate evaluation of this interventions, but also leads to less favourable outcomes (Perl & Jacobs, 1992). In other countries, such guidelines are already available for various interventions in substance abuse treatment, but in Belgium hardly any evidence-based guidelines have been developed for the treatment of persons with substance abuse problems.

# 1. Research questions and objectives

The objective of this research project is to assess which interventions in substance abuse treatment are evidence-based, which evidence-based guidelines and protocols exist in substance abuse treatment, to what extent these interventions are known and implemented in practice and which is the attitude of practitioners towards such guidelines. The ultimate objective of this study was to contribute to the development of evidence-based guidelines that are applicable in substance abuse treatment in Belgium. On the basis of the problem definition and objectives, different research questions have been formulated:

- Which interventions in substance abuse treatment are evidence-based and which interventions aren't (yet)? Concerning which interventions a lot of research has been performed and concerning which interventions not (yet)? For which outcome measures and specific substances evidence-based interventions are available?
- Which evidence-based guidelines are available for substance abuse treatment and what is the quality of these guidelines?
- Which knowledge is available about evidence-based practice and evidence-based guidelines in substance abuse treatment in Belgium?
- What is the state of the art of the implementation of evidence-based guidelines in substance abuse treatment in Belgium?
- What is the attitude of practitioners in substance abuse treatment concerning evidence-based practice and evidence-based guidelines?
- Which existing evidence-based guidelines can be recommended for the treatment of substance abusers in Belgium?
- Which recommendations can be made for the implementation of these guidelines?

In order to answer these research questions and to achieve the objectives, first a literature review was performed. Based on articles concerning the effectiveness of certain interventions in substance abuse treatment, an overview was made of the degree of scientific evidence that is available for different types of interventions and substance abuse problems. We did so, applying the CBO-criteria (Dutch Quality institute for health care). In addition, a review was made of existing evidence-based treatment protocols and guidelines for different types of substance abuse problems.

Secondly, a first survey was done in substance abuse treatment in Belgium. A representative sample of 60 substance abuse treatment agencies was selected, i.e. psychiatric hospitals, crisis intervention centres, psychiatric emergency wards and psychiatric wards of general hospitals; specialised residential treatment centres and specialised outpatient centres. In these agencies, the persons responsible for the therapeutic programme were interviewed, as they are well aware of the available services offered and have information about the background, principles and actual practice of the treatment programme. They were interviewed by means of a semi-structured interview concerning their knowledge on, attitudes towards and the implementation of evidence-based practice and evidence-based guidelines in the agency.

In a third phase, the existing evidence-based guidelines were evaluated by means of the AGREE-instrument (AGREE-collaboration, 2001). The AGREE-instrument is a general means for developers and users of guidelines to evaluate the methodological quality of clinical guidelines. Next, a review was made of strongly recommended evidence-based guidelines, recommended evidence-based guidelines and not recommended evidence-based guidelines, in order to propose evidence-based treatment protocols that are applicable in Belgium.

Finally, based on this review, one of the existing evidence-based guidelines was selected and the respondents of the first survey were contacted a second time to assess and evaluate this guideline (APA-guideline, 2006). Based on the review of the literature and both surveys, recommendations and suggestions were made concerning the implementation of evidence-based guidelines in Belgian substance abuse treatment.

## 2. Results

### 3.1. *Literature review*

#### 3.1.1. Effectiveness of interventions

Based on articles concerning the effectiveness of interventions in substance abuse treatment, an overview was made of the level of scientific evidence that is available for different types of interventions and substance abuse problems. We made use of the CBO-criteria (Dutch Quality institute for health care) for determining the level of evidence, and found interventions with a level 1 (highest level of evidence) and level 3 of evidence.

Concerning the effectiveness or ineffectiveness of certain interventions, a **level 1 of evidence** was found for the treatment of different types of substance abuse problems and for some specific outcomes.

*For the treatment of substance abuse problems in general*, a level 1 of evidence was found for the effectiveness of voucher-based interventions, motivational interviewing, the Community Reinforcement Approach (CRA), relapse prevention and case management. There is also a level 1 of evidence for the fact that – in general – no convincing and/or inconsistent evidence can be found for self-help groups, therapeutic communities and cue exposure.

Concerning pharmacotherapeutic treatment of *alcohol problems*, there is a level 1 of evidence for the effectiveness of benzodiazepines, carbamazepine, acamprosate, disulfiram and naltrexone, and for the ineffectiveness of SSRI's. The use of Adrenergic  $\alpha_2$  agonists, magnesium, anti-psychotic medication and clomethiazole is not recommended. For all pharmacotherapeutic interventions, potential health risks need to be taken into account.

Brief interventions appear to be the most evidence-based interventions for the treatment of alcohol problems. Case management, self-monitoring/training in self-control and self-help are relatively evidence-based for the treatment of alcohol problems, but AA and the Minnesota-model are not evidence-based. Stress management and relapse prevention are also less evidence-based for the treatment of alcohol problems. No conclusions can be made concerning the effectiveness of occupational therapy.

It appeared that the content of the intervention appears to be more important than the setting.

There is also a level 1 of evidence for the effectiveness of contingency management in combination with outpatient treatment, behavioural family therapy, the Community Reinforcement Approach (CRA), social skills training, coping skills training and motivational work. There isn't much evidence for the effectiveness of psychodynamic therapy for the treatment of alcohol problems.

For the treatment of abuse with *benzodiazepines*, there is a level 1 of evidence for the effectiveness of minimal interventions and gradual reduction schedules. Up to now, no evidence has been found for the effectiveness of pharmaceutical treatment of abuse of benzodiazepines.

For the treatment of *cannabis abuse*, a level 1 of evidence is available for the effectiveness of cognitive behavioural therapy and coping skills training in combination with motivational interviewing and provision vouchers.

For the treatment of *cocaine problems*, there is a level 1 of evidence for the ineffectiveness of carbamazepine, dopamine-agonists, antidepressants and acupuncture. On the other hand, counselling and relapse prevention appear to be effective.

For the treatment of *opiate dependence*, there is a level 1 of evidence for the effectiveness of methadone, buprenorphine,  $\alpha_2$  adrenergic agonists and family interventions. Some evidence is available for the effectiveness of therapeutic community treatment, but more research is needed.

In addition, a **level 3 of evidence** was found for the effectiveness or ineffectiveness concerning some specific outcomes for the treatment of different types of substance abuse problems.

*For the treatment of substance abuse problems in general*, a level 3 of evidence was found for the fact that no significant differences in outcomes can be observed between outpatient and residential treatment, neither between standardized and extended outpatient treatment.

The same level of evidence was also found for the effectiveness of brief motivational interventions, behavioural family therapy, coping skills training, aftercare and NA, and for the ineffectiveness of biofeedback, acupuncture and occupational therapy. No causal relationship has been identified between 12 step programmes and drug-related outcomes.

A level 3 of evidence was also found for the effectiveness of citalopram and fluoxetine for the treatment of alcohol problems, and for the ineffectiveness of acupuncture. Carbamazepine appears to be effective for the treatment of abuse of *benzodiazepines*.

Concerning the treatment of *cannabis problems*, a level 3 of evidence was found for the effectiveness of brief interventions, psychodynamic treatment, motivational interviewing and relapse prevention

A level 3 of evidence was also observed for the effectiveness of disulfiram, day treatment, outpatient treatment, group therapy, the Community Reinforcement Approach and coping skills training for the treatment of *cocaine abuse*. Dexamfetamine appears to be ineffective for the treatment of cocaine problems and it was not (yet) proven that behavioural therapy and cognitive behavioural therapy are effective. The 12 steps programme is ineffective for the treatment of cocaine abuse, but it can be effective if clients participate actively and follow it in combination with counselling.

A level 3 of evidence was found for the effectiveness of needle exchange programmes, counselling in combination with methadone, cue exposure, controlled heroin prescription, the Community Reinforcement Approach and outpatient treatment for the treatment of *opiate problems*. Psycho-education in combination with naltrexone appears to be relatively ineffective over time, and conclusions concerning the effectiveness of drug consumption rooms are not possible yet.

### 3.1.2. Evidence-based guidelines

The literature review provided in addition an overview of available evidence-based guidelines for the treatment of alcohol, benzodiazepine, cannabis, cocaine and opiate dependence. These guidelines have been evaluated using the AGREE-instrument (<http://www.agreecollaboration.org/instrument/>), which led to an appreciation of the degree of recommendation of these guidelines: strongly recommendable, recommendable, not recommendable.

In our review, guidelines were found for the treatment of various types of substance abuse problems (e.g. alcohol, cannabis, cocaine, opiates and benzodiazepines), and also for the treatment of substance abuse problems in general. We retrieved various guidelines which are ‘strongly recommendable’ for the treatment of alcohol, cannabis, opiate and cocaine problems and for the treatment of opiate dependence with methadone and buprenorphine.

Some general guidelines were found that are ‘recommendable’. Concerning the treatment of cocaine problems, there are no guidelines that can be strongly recommended, but there is one guideline that can be recommended. For the treatment of abuse of benzodiazepines, no guidelines could be found that can be recommended or strongly recommended.

Some guidelines exist concerning some specific interventions for the treatment of substance abuse problems: ‘strongly recommendable’ guidelines are available concerning detoxification, case management and pharmacotherapeutic treatment of substance abuse, and some ‘recommendable’ guidelines exist concerning detoxification, case management, intensive outpatient treatment, brief interventions, brief clinical crisis interventions, family therapy, group therapy and aftercare.

Furthermore, the review also revealed some guidelines that cannot be recommended.

Finally, since the AGREE-instrument results in separate domain scores, it is important to assess the various domain scores of the guidelines.

### 3.2. Survey

The survey of a representative sample of 60 substance abuse treatment agencies in Belgium concerning their knowledge of, attitudes towards and implementation of evidence-based practices and guidelines, revealed following results.

Almost all respondents try to keep up to date with new developments in the field of substance abuse treatment, mostly through training and conferences, colleagues and the internet. Most of the respondents look up scientific literature (49/60), mainly in journals, on the internet and through umbrella organisations, primarily as a result of specific problems or questions that arise in clinical practice or as a result of attending a conference.

Substance abuse interventions that are applied most frequently, are individual counselling, family-oriented interventions, pharmaco-therapeutic interventions, psycho-education and brief interventions. Flemish agencies often make use of gradual reduction schedules, behavioural and cognitive interventions, copings skills training, psycho-education and aftercare as compared to Walloon agencies. Walloon agencies apply psychodynamic interventions more often than Flemish institutions. Most respondents are convinced of the scientific evidence for pharmaco-therapeutic interventions, behavioural and cognitive interventions, gradual reduction schedules, aftercare, relapse prevention, harm reduction and coping skills training.

In 40 of the 60 guidelines, guidelines and/or protocols are available. In Flanders, more guidelines and protocols are used than in Wallonia. In Flanders the guidelines are mainly self-developed. In these 40 agencies, all the respondents have faith in the guidelines they use, mainly because they participated in the development of the guidelines, because the application of the guidelines appears to be successful, because the guidelines were based on scientific research and because they have been adapted based on experiences from daily practice.

The guidelines are mainly based on scientific literature (38/39), clinical experience (35/39) and consultation (36/39). Most of the time, there is a high level of implementation (25/36). In 31 of 39 institutions where

guidelines or protocols are being applied, the implementation is followed-up and coached and in 33 institutions the guidelines are available for everyone. In 25 institutions they are applied by everyone.

Most of the respondents have a positive attitude towards the current tendency towards more evidence-based practice (40/60), since this guarantees the quality of treatment, objective information concerning treatment interventions and a framework to refer to. Six respondents have a negative attitude towards guidelines, but also other respondents formulate objections concerning the application of evidence-based guidelines. They say that by using guidelines and protocols, the individual patient is not taken into account. They also have doubts concerning the value of addiction research, and they think it is important that there is therapeutic freedom.

The attitude of directors and policymakers within these institutions towards this tendency to more evidence-based practice, is mainly positive (39/59). In Flanders, the attitude of the directors of the agencies is more positive than in Wallonia. The main reason for this positive attitude is the guarantee of quality and the framework it provides. Thirty-seven respondents say there is no difference in attitude between different disciplines/professions in the agency, 21 say there is. Some respondents think these differences are mostly personal, other respondents think they have rather to do with persons' position.

Most respondents (completely) agree with the statement that evidence-based guidelines ameliorate the quality of care, are a means to learn something on treatment interventions, are a useful source of advice and can be implemented in existing programmes. Most of the respondents (53/59) think results of scientific research are useful to a certain extent for daily practice, because they open new perspectives and provide a theoretical framework. They also think there are limits to scientific research due to the gap between the research context and the context of daily practice and since it obscures individual differences.

Most of the respondents share the opinion that evidence-based guidelines are useful to a certain extent (40/60), or very useful (16/60). More Walloon than Flemish respondents say evidence-based guidelines are not useful. The reasons for their usefulness are the fact that they offer a quality guarantee and provide a frame of reference. According to some respondents, guidelines are not useful because individual differences are ignored, the context in practice differs from the research context and there is no more therapeutic freedom using these guidelines. Most respondents think clinical experience and scientific research are both as important in daily practice (34/60). Twenty-two respondents think clinical experience is more important than scientific research, mostly because they argue that by doing so individual differences can be taken into account. Some respondents say the guidelines should be 'translated', in order to be able to implement these. Four respondents think scientific research is more important than clinical experience.

Finally, most of the respondents agree that it is their professional responsibility to use treatment modalities that have been proven by scientific research (39/58). Twenty-four respondents do not agree that the philosophy of their programme is more important than evidence-based guidelines. Respondents are more inclined to adopt new guidelines when they appeal to them intuitively, they make sense to them, they are already used by colleagues who are positive about them and when they have the feeling they had enough training to implement these in a correct way. They are not eager to implement them when they are imposed from above by (external) policymakers. Lack of time is seen as an important barrier for the implementation of evidence-based guidelines and protocols, as well as the lack of administrative support, an adequate management system and coaching. Useful strategies that are mentioned, were staff training, easy access to the guidelines and official manuals.

### ***3.3. Proposal of evidence-based protocols/guidelines which are applicable in Belgium***

The 60 respondents that participated in the first survey, were invited to participate in the second survey concerning the APA-guideline (2006), that was selected after the evaluation of all guidelines that were assessed using the AGREE-instrument. Thirty-four respondents agreed to participate again. They were asked various questions concerning the content and implementation of the APA-guidelines (2006). These data were analysed quantitatively as well as qualitatively.

The qualitative analysis showed that some respondents think some information is missing in the guidelines or that some information was not elaborated well. Some respondents questioned the value of addiction research. All respondents except one, were willing to implement the proposed guidelines, mainly because the APA-guidelines (2006) fit their daily practice well and because they are general enough, so there is enough room for creativity. The evidence-based character of the guidelines is also a reason to implement these guidelines in practice.

Still, some respondents who were prepared to implement the guidelines, see potential barriers in doing so. They mention the lack of financial resources, limitations of the setting they work in and a lack of knowledge concerning interventions or agencies in their region. Some respondents say they can't implement the guidelines completely. To be able to implement the guidelines, some respondents say there is a need for training and additional staff. Other respondents think there needs to be a widespread and gradual distribution of the guidelines.

The qualitative analysis also showed that some of the respondents think the language of the guidelines is important for the implementation. Some respondents also propose a more concrete elaboration of some therapies mentioned in the guidelines, and case studies to support the suggested interventions.

The quantitative analysis showed that the respondents (28/34) agree that the recommendations are unambiguous and specific. Most of them also agree that the core recommendations are easily recognizable (28/34). In the end, most of the respondents (26/34) state the complete guidelines have to be translated to their own language.

## **4. Recommendations for implementation**

Various sources have been applied in order to formulate recommendations for implementation of evidence-based guidelines in substance abuse treatment. First of all, the first survey was used. Furthermore, the AGREE-evaluation played an important role and some literature on the implementation of guidelines was reviewed (Edmundson & McCarty, 2005; Greenhalgh et al., 2004; Grimshaw et al., 2004; Van Driel et al., 2003).

### ***4.1. Motivating and involving practitioners***

Most of the respondents have a positive attitude towards the current tendency towards more evidence-based practice and think scientific research findings and evidence-based guidelines are useful to a certain extent. This is an important finding, since people in practice not only have to get to know these results, but also have to accept them and especially integrate them in their daily practice with patients (Van Driel et al., 2003). It is also important because a part of the respondents perceives the lack of faith in the use of evidence-based guidelines as a possible barrier for the implementation of evidence-based guidelines. Enough attention needs to be paid to the motivation of practitioners for EBP and evidence-based guidelines. It is good to know that innovations that have a clear, unambiguous advantage concerning effectiveness and cost-effectiveness will be accepted and implemented more easily. This advantage needs to be accepted by all key figures. Even for so called evidence-based innovations, a long period of negotiation is needed, in which the meaning of such innovations is discussed (Greenhalgh et al., 2004).

Involvement of the field is strongly recommended for the implementation of evidence-based guidelines. Practitioners have to be consulted. The people responsible for the therapeutic programme can play an important role, since they mostly have to coach and support the implementation of guidelines. Innovations that can be tried out by future users, will more easily be adopted and implemented (Greenhalgh et al., 2004). Working groups and consensus meetings can also be possible strategies for the implementation of evidence-based guidelines. Van Driel et al. (2003) say though that consensus meetings can be a double-edged sword: on the one hand, they can bring people together to work on more uniform behaviour in an effective way, on the other hand, they can also bring together people with a typical resistance towards change and in this way strengthen the resistance. These different types of resistance need to be taken into account.

### ***4.2. Adaptation of the guidelines***

We can also identify barriers concerning implementation from the remarks of the respondents concerning the tendency towards more EBP and concerning the usefulness of scientific research findings and evidence-based guidelines in daily practice.

The respondents from substance abuse treatment agencies fear that by using evidence-based guidelines and protocols, the individual patient is not accounted for appropriately and regard this as a reason for the limited usefulness of such guidelines and of scientific research findings in general. The importance of the individual is a reason for them to find clinical experience more important than scientific research.

However, evidence-based guidelines do not have to exclude the importance of the individual patient. We agree with O'Connor (2005), who states that when implementing evidence-based guidelines, individual features of patients need to be taken into account systematically. He states it is important to be aware of the preferences and priorities of the patient.



Also on the level of the institution, there needs to be room for adaptations of evidence-based guidelines. Some respondents say it is difficult to implement evidence-based guidelines, because of the specific features of their treatment method, setting or philosophy. This does not mean that the respondents think the philosophy of their programme is more important than evidence-based guidelines. However, there seems to be a fear that substance abuse treatment will be made standardized. From the second survey on the APA-guidelines (2006) appears that the main reason to implement these guidelines, is the fact that they already fit daily practice. If a possible user can adapt and/or refine the innovation that will be implemented to his own needs, it will be adopted and implemented more easily (Greenhalgh et al., 2004).

### **4.3. *Distribution of the guidelines***

The distribution of the guidelines on individual and institutional level, can be facilitated by easy access to the guidelines and more specifically by access to the guidelines through the internet. For the implementation, a paper version and an electronic version of the guidelines should be used. These could be distributed by an official manual, by short summaries and/or a review in a peer-reviewed journal.

Furthermore, a decision process should be applied when implementing guidelines. The APA (2006) has attached a quick reference guide to its guidelines. In this attachment, a clear summary is given of the most important recommendations in the original guideline<sup>1</sup>. This instrument appears to be useful in daily practice. If it is possible to translate this, it could be used for the distribution of these guidelines. The distribution could happen through postal services, through e-mail and/or umbrella or professional organisations and networks. The guidelines can also be distributed through a central service. Good communication of the guidelines is a prerequisite.

Training of practitioners is strongly recommended for the implementation of evidence-based guidelines. Most of the respondents state that they will be more eager to implement the guidelines when they have the feeling that they got enough training. A lack of knowledge is mentioned as a possible barrier for the implementation of the APA-guidelines (2006). For training, education and advice, experts and external people can be involved. Conferences are also mentioned as a possible strategy. They are strongly recommended, since in this way, different agencies and professionals can be reached at the same time.

However, new findings do not guarantee any change in treatment methods (Anderberg & Dahlberg, 2005). A passive educational approach (just distributing printed guidelines and publishing research findings) is an inefficient implementation strategy and causes at the very most a process of awakening. Lectures and conferences do not seem to be very powerful either to change people's behaviour. Interactive ways of training have clearly demonstrated behavioural changes, as opposed to lectures which are often limited to a unilateral information-transfer (Van Driel et al., 2003). This is why workshops should be offered during conferences. Innovations with clear advantages for the intended users, are more easily adopted and implemented (Greenhalgh et al., 2004).

### **4.4. *Advice and support of implementation***

It is not recommended to make the implementation of guidelines compulsory. They should be formulated as an advice and not as an obligation. We learn from the quantitative analysis that 30 of 57 respondents say they would not be inclined to implement guidelines, if this would be obliged and obligation is perceived as a strong possible barrier. On the other hand, Greenhalgh et al. (2004) found that authoritative decisions augment the chance that innovations will be adopted as compared to contingent and collective decisions. It is also important who obliges or recommends the guidelines. It is necessary that guidelines are supported by opinion leaders. 45 respondents found this a useful strategy. Moreover, former research makes clear that the use of opinion leaders is effective. Further research needs to make explicit how opinion leaders should be identified and recruited (Van Driel et al., 2003). According to Greenhalgh et al. (2004) there are different types of opinion leaders: experts and peer-opinion leaders. Experts have influence by their authority and status, peer-opinion leaders have influence on the basis of what they represent and on the basis of their reliability. They can have a positive, but also a negative influence.

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<sup>1</sup> We advise interested readers to look up the "Quick Reference Guide" (APA 2006), which can be retrieved on the following website: [http://www.psych.org/psych\\_pract/treatg/quick\\_ref\\_guide/SUD\\_ORG.pdf](http://www.psych.org/psych_pract/treatg/quick_ref_guide/SUD_ORG.pdf).

## **4.5. Policy**

The guidelines have to be supported by opinion leaders in substance abuse treatment, but also by the policymakers in treatment agencies. Policy support and regional adjustment are important. If the meaning attributed to the innovation by individual users is congruent with the meaning policymakers attribute to it, there is a greater chance that the implementation is successful (Greenhalgh et al., 2004).

An adequate management system is also important. According to Greenhalgh et al. (2004), a lot of researchers recognize that the implementation of most clinical guidelines demands for a change of the system (organisationally as well as individually). The success of the implementation depends first of all of the organisational structure: an organisation with an adaptive, flexible structure, with structures and processes that promote decisions will enhance the success of the implementation. Furthermore, it depends on leadership and management: leaders need to be actively involved and frequently consulted. Also human resources management is important for the motivation, capacity and competence of individual users. All levels need to be involved. Evaluation and feedback are also necessary: accurate and regular information about the consequences of the innovations and the impact of the implementation process augment the chance of a successful implementation (Greenhalgh et al., 2004). The effectiveness of feedback for the implementation of EBM has already been investigated, and although it is small, it seems to influence the physicians to follow the guidelines. Feedback with a comparison with 'peers' would also be effective to implement EBM (Van Driel et al., 2003). According to Grimshaw et al. (2004), available evidence for the effectiveness of feedback is not very powerful.

Greenhalgh et al. (2004) also mention the adoption of innovations: if an innovation is adapted to the local context, it will be more successful. The respondents also mention that guidelines have to fit the setting they work in and have to be adapted to the Belgian context. Implementation of guidelines should be a gradual process, rather than a straightforward process. If an innovation can be split up in more manageable parts and can be implemented gradually, it will be adopted and implemented more easily (Greenhalgh et al., 2004).

According to the respondents, extra resources are needed to facilitate the implementation of guidelines. A lack of time and of financial resources and staff are mentioned as possible barriers. Resources could be invested in more administrative support, and also in coaching when implementing evidence-based guidelines. It is also needed to provide information and support in a format that is flexible and that can be integrated in the daily activities of the staff (Willenbring et al., 2004).

It can not be derived from scientific research that more resources are needed in order to implement evidence-based guidelines. There are few studies that have evaluated the economical aspects, and existing studies are methodologically weak (Grimshaw et al., 2004). In these studies, the time necessary for various activities is often not made explicit and such activities are frequently undertaken outside working hours. Further estimations of the price of different methods for the distribution and implementation of guidelines are needed, before the expenses reported in previous studies can be generalised (Grimshaw et al., 2004).

## **5. Discussion and conclusion**

The research project 'Knowledge and implementation of evidence-based guidelines in substance abuse treatment' has to be seen as an explorative research in which a first impulse is given for the development of guidelines that are applicable in the Belgian context.

Various objections can be made concerning the evolution towards more evidence-based practice in substance abuse treatment. The usefulness of addiction research can be questioned. Some of the most well-known researchers in substance abuse treatment have radically different points of view whether available reviews concerning interventions in substance abuse treatment are inconsistent or not. While Miller & Wilborne (2002) are motivated by what they identify as considerable convergence between different reviews and meta-analyses, Finney (2000) takes the opposite position (Bergmark, 2005). Some respondents in the first survey also question the value of addiction research.

Van Driel et al. (2003) mention that it is often concluded that for part of the research questions or outcome measures no or conflicting evidence is available. It is also often questioned whether populations in RCTs are representative for substance abusing populations encountered in treatment.

On the other hand, other authors state that systematic reviews guarantee a more efficient use of scientific results by policymakers, practitioners and possibly in the future also by patients and clients. They stimulate evidence-based thinking and practice. Systematic reviews can diminish the gap between scientific research and practice

(Hannes, 2006). Moreover, RCT-literature appears to be more representative for treatment seeking patient populations than was assumed before (Stirman et al., 2005).

To the extent that evidence-based research, systematic reviews and meta-analyses can produce new and founded knowledge, these efforts should be welcomed. On the other hand, it is an illusion that this kind of knowledge will anyway augment the success ratio of treatment. A lot of baseline work still needs to be done concerning assessment, offering adequate treatment, training staff members, documenting what actually happens in treatment and which efforts are necessary for improving quality of life, etc. (Ravndal, 2005).

One should not focus too much on the word ‘evidence’ in evidence-based practice. It is not because something has not (yet) been proven, that it doesn’t work: concerning some interventions very little research has been done, and it is not always easy to do research concerning the effectiveness of specific interventions. We should warn for what Gossop (2003) calls ‘scientific fundamentalism’, more specifically when treatment and research methods claim to be universally valid. The complexity of drug-free treatment needs to be taken into account. Within this complexity, evidence-based treatment methods are just one of many elements (Pedersen, 2005). Even stronger: ‘evidence’ is just a part of EBP. The preferences of the patient, society and the environment we live in and the experience of the therapist need to be taken into account. What our society perceives as a problem influences what our society prefers to do about it (means and manpower), which interventions will be used and which outcomes will be important. Dependent of persons’ way of thinking and the clinical experience, research findings can be interpreted in different ways. The translation of scientific recommendations to practice cannot be straightforward (Burgers & Van Everdinge, 2004; Hannes, 2006 ).

In general, it can be concluded that there is already some knowledge on evidence-based practice and evidence-based guidelines in Belgian substance abuse treatment, but further research is needed concerning the (in)effectiveness of some specific interventions. This knowledge needs to be distributed among practitioners in an accessible and useful way, for example through evidence-based guidelines. Guidelines are already applied, but these are rarely evidence-based guidelines, although many evidence-based guidelines are available for the treatment of substance abuse problems. It is thus important that these existing evidence-based guidelines are available for a broad public. Generally, the attitude towards evidence-based practice and evidence-based guidelines is positive and its usefulness is acknowledged, although some critical remarks were made. We can conclude that there is a certain willingness to start with the application and implementation of evidence-based methods and guidelines in substance abuse treatment in Belgium, if certain conditions are met.